ISSUES IN THE IMPLEMENTATION OF PROACTIVE ENVIRONMENTAL STRATEGIES

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REPRINTED FROM

BUSINESS STRATEGY and the ENVIRONMENT

VOLUME 1, PART 4, WINTER 1992

Published by:

European Research Press Ltd, Tayson House, 34-38 Chapel Street, Little Germany, Bradford BD1 5DN, UK.
Tel: +44 (0)274 729315  Fax: +44 (0)274 306981
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Abstract

Management consultants, environmental groups, and industry trade associations have all recently offered guidelines for companies to improve environmental performance. The guidelines suggest ways that companies can implement strategic change to move beyond compliance with regulation, assume responsibility for the environmental impacts of their products, and gain public credibility. Much of the advice offered can be useful to managers who are responding to rapidly changing environmental pressures.

Nevertheless, implementation of some of the general guidelines could impose undue costs or introduce untoward organizational consequences for certain companies. While mentioned as an issue in the management literature, companies need more systematic advice on how best to tailor these broad guidelines for environmental strategic change to the specific needs and capabilities of their companies. In addition, as many companies are comprised of diverse business units that are sometimes linked together only through financial controls, managers must adapt environmental management programs to unique ‘substructures’ within the firm. These substructures can differ dramatically in their environmental performance and their management capabilities.

Elsewhere we have offered a framework for analysing environmental strategies and management programs. In this paper, we identify some of the implementation issues that confront companies when they introduce environmental strategic change. We argue that environmental strategies are most effectively implemented when they are consistent with the organisational characteristics and operating context of the company involved.

We use Volvo’s experience with environmental strategic change to highlight many of the difficulties that companies may encounter when altering their approach to environmental performance. The case illustrates how a company can modify its own strategy and management programs for more effective change. It is an interesting case to study because of the proactive and comprehensive nature of Volvo’s environmental strategy and management programs.

Environmental Strategic Change

Strategy formulation and strategy implementation are the two stages of strategic environmental change. During strategy formulation, managers must determine the rate and direction of change. Implementation involves establishing the management programs necessary to achieve company goals.

The Dimensions of Environmental Strategy

Managers must determine the size of the strategic problem by comparing the organisation’s operations and capabilities with current and future demands. They must then evaluate the costs and benefits of responding to these demands, and determine the time horizon that exists for implementation. In the environmental arena, strategic forecasting can be problematic because of the large degree of technical and social complexity surrounding environmental issues. The costs of poor environmental performance can be extraordinarily high and are often underestimated.

Managers should consider their company’s position with respect to three dimensions of strategy: the business dimension, the political dimension, and the technical dimension. The business dimension involves the use of environmental issues to create a competitive advantage for the company through cost savings and increased profits. The political dimension involves a company’s interaction with
stakeholders, such as regulators, local communities, environmental interest groups, customers, investors, and employees. For most companies, a political strategy means building legitimacy for environmental activities in the social context in which they operate. The technical dimension should be consistent with the business and political strategies. It guides actual changes in the environmental performance of both product and process. Each company has different environmental liabilities throughout the full product life-cycle and different technical capabilities that influence its choice of a technical focus.

**Choices in Management Program**

Strategy formulation provides strategic direction for an organisation and indicates how it is to move forward. Once a strategy has been developed, programs need to be designed to bring to bear the competencies needed to implement the strategy. The generic programmatic choices available to companies are shown in Table 1. They include: structures for environmental policy, mechanisms to monitor and review environmental performance, incentives and controls to encourage environmental achievements, methodologies and tools to assist environmental decision making, guidelines for environmental investments, and guidelines for communication with stakeholders. Within each of these categories, companies have a variety of options from which to choose.

**Volvo’s Environmental Strategy and Management Programs**

**History**

In 1988, Volvo introduced one of the most comprehensive and proactive environmental strategies in industry. The Volvo Group currently consists of four product companies: Volvo Car Corporation, Volvo Trucks and Busses, Volvo Penta (Marine and Industrial Engines), and Volvo Flygmotor (aircraft and space engines), with Cars, Trucks and Busses as its largest operating sector. At the year end 1991, the Group’s sales for all its geographic areas was 77,223 MSEK (approximately $11,583 million).

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**Table 1: Programmatic Choices in Environmental Management**

<table>
<thead>
<tr>
<th>Programmatic Categories</th>
<th>Description</th>
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<tbody>
<tr>
<td>Structure for environmental policy</td>
<td>A company needs to establish a structure for environmental management to internalise and meet its regulatory and its more proactive environmental goals. In addition, it needs to allocate environmental responsibility, specify the flow of internal and external information, and offer guidelines on how to carry out its environmental goals.</td>
</tr>
<tr>
<td>Mechanisms to monitor and review environmental performance</td>
<td>The potentially severe consequences of poor environmental performance necessitates accurate monitoring of environmental achievement. Companies mainly rely on two mechanisms for this: direct reporting of environmental activity and environmental auditing.</td>
</tr>
<tr>
<td>Incentives and controls to encourage environmental achievement</td>
<td>Incentives and controls are important to emphasise the company’s commitment to environmental performance, and to encourage employees to perform in a manner which is consistent with this commitment. Incentives recognise and reward environmental achievements and innovations, and programs to motivate employees. Control mechanisms assess environmental performance in performance evaluations.</td>
</tr>
<tr>
<td>Guidelines and tools for environmental investments</td>
<td>Environmental investments often do not offer short-term financial pay-backs when based on traditional accounting procedures. Financial guidelines can suggest how managers can consider such benefits as long-term financial savings and avoided costs when making environmental investments. Tools to help evaluate environmental performance in financial terms can be created.</td>
</tr>
<tr>
<td>Methodologies and tools to assist environmental decision making</td>
<td>One of the most difficult tasks of environmental management is to assist employees making decisions about complex environmental issues. To reduce uncertainty in environmental decision making, companies can employ tools to help evaluate the environmental impacts of product and process decisions, systems to record company activities and their related risks, or standard operating procedures to guide employees when performing environmental related tasks.</td>
</tr>
<tr>
<td>Guidelines for communication with stakeholders</td>
<td>To ensure external support of the environmental strategy, managers have to communicate with company stakeholders. These programs could include participation in environmental debates and financial support of environmental activities.</td>
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</table>

Volvo operates in the international arena mainly in Western Europe and North America. In recent years, through industrial alliances with companies such as Renault, GM, and Mitsubishi, Volvo has
expanded its international presence considerably.

Volvo's corporate culture reflects the larger Swedish culture in which it operates, which is recognised for its high level of social concern and its emphasis on negotiation and consensual decision making. Volvo has also been influenced by the social commitments of its leaders, starting with safety in 1927. Volvo's current chairman, Pehr Gyllenhammar, has expanded the scope of the Group's social commitments beyond product safety to include workplace and environmental issues.

Emergence of a New Environmental Strategy

Volvo has a long history of environmental activity, and was one of the first industrial manufacturing corporations in the world to adopt a formal environmental policy. Until the mid eighties, the primary emphasis of Volvo's environmental strategy was compliance with applicable regulations. It had some notable achievements in this regard, including the development of the three-way catalytic converter with Lambda Sond.

During the course of the eighties, a general growth in environmental awareness in Sweden and throughout the world alerted Volvo managers, including its chairman Pehr Gyllenhammar, to the elevated importance that the environment exerted in business decisions. The magnitude and scope of environmental pressures peaked in 1988, and in October Gyllenhammar called for the formation of an Environmental Task Force, its members including the top managers of each Volvo Company. Gyllenhammar was sensitive to changing public interests. Remembers one employee, 'and realised that we have to have our own goals in the future. [It was] a way for [him] to manifest a true conviction that industry had to show the way and to find a...better image for the company. We were not the ones trying to back off from our responsibilities. We wanted to fix them.'

The Task Force developed Volvo's new environmental strategy. Building upon its earlier strategy with safety, Volvo sought to make the environment a 'cornerstone' of the company and develop an unique company environmental profile. As consumer interest grew, Volvo could then use this profile to market its products on environmental performance as well as safety. Building a unique and legitimate company profile meant staying ahead of legislation and active communication of Volvo's environmental activities with company stakeholders.

If Volvo managers were going to claim that they 'cared' about the environment, however, it was important that they could back up these claims. Olle Boethius, Manager of Environmental Affairs at Volvo Car Corporation, explains that environmental profiling is a delicate task, because 'it is not that easy to build up, but it is very easy to fail.' For products, Volvo pledged to develop and market the 'most efficient' technologies, allowing for the production of products with superior environmental performance but mainly within the constraints of the product. For production processes, Volvo pledged to adopt manufacturing processes that have the least possible impact on the environment. Both product and process improvements would take into account financial constraints.

Management Programs

Volvo's Task Force Report also outlined a set of management programs to implement its environmental strategy. The set of programs, as found in Table 2, can be described using the general categories discussed above.

Implementing Environmental Strategic Change

The implementation of strategic change requires some organisational adaptation. The extent of this adaptation is partially determined by how far and quickly the company decides to move. With more radical change, more resistance will be encountered, more resources will be needed to overcome this resistance, and more uncertainty will be introduced into the organisation.

To avoid these problems, executives often prefer incremental change, which, if done properly, can be effective. In some situations, however, it can be too slow to resolve a strategic problem. The challenge for strategic managers is to choose strategic and programmatic options that will foster change, while being as consistent as possible with the company's existing organisational capabilities and
context. Such consistency is crucial to obtaining desired objectives at minimum cost to the organisation.

<table>
<thead>
<tr>
<th>Table 2: Volvo's Programmatic Choices</th>
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<tr>
<td><strong>Structure for environmental policy</strong></td>
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To obtain guidance on how to make these changes, managers can look to a growing body of literature from academics, consultants, and participants in industry. The literature suggests which strategic and programmatic choices are appropriate for a specific level of environmental performance. Several sources outline management systems for different levels of environmental compliance; others focus on appropriate management techniques for a 'proactive' company. While this literature is an important resource for environmental managers, it offers too little guidance on how managers can design strategies and programs to fit with the unique characteristics of their organisations. At the extreme, it draws managers away from these considerations by leading them to believe that there is 'one best way' to handle environmental issues. Most practitioners recognize right away this limitation in the advice they are being offered. It does not mesh with what they know about their company and how it works.

Significant evidence exists that popular business management trends exert a strong influence on the techniques of corporate management. New concepts successfully implemented in certain organisations dominate management techniques for a period of time, even when they are inappropriate for specific organisations. DiMaggio and Powell offer three reasons for this phenomenon. Firstly, organisations will submit to both formal and informal pressures from other organisations upon which they depend. In the environmental pollution arena, this can occur if regulatory bodies require the use of certain organisational structures, which spread the use of inappropriate general techniques to organisations in which they do not fit. American command and control environmental regulations, for
example, focus on a single pollutant medium, and they often place confusing, redundant, and even contradictory requirements on the regulated organisation. This type of regulation creates situations in which companies must devote resources to developing the formalised administrative structures for environmental management. These requirements are not universally applicable, resulting in poor environmental and organisational performance in certain organisations. Societal pressures for increasingly detailed environmental disclosures require similar centralisation of authority over environmental issues. They place pressures on organisations for uniformity of procedures, even when this uniformity may be inappropriate.

A second reason for adapting inappropriate general techniques is that when faced with uncertainty, organisations may model themselves after organisations that have already proven to be successful. This phenomenon may also be occurring in the environmental arena, where certain companies have become designated leaders in environmental management, to which others aspire.

Finally, normative pressures that stem primarily from professionalism can cause the adoption of 'fashionable' management systems. Universities, professional training institutions, and professional and trade associations, explain DiMaggio and Powell, are all vehicles to develop normative rules about organisational and professional behaviour. In the environmental arena, this trend can be seen in the increasing number of industrial or trade groups which require members to establish certain environmental management practices. Benchmarking, which is becoming increasingly common in industry, leads to the adoption of these inappropriate general techniques. Companies are either forced (via regulation) or choose voluntarily to imitate other companies because of their own fear and insecurity. While in some ways positive and at the core of all progress and innovation, this diffusion mechanism has serious drawbacks when it is done without consideration for particular and unique organisational and contextual elements.

The general norms in environmental management do not offer the most effective management approach for each individual organisation. Instead, the concept of 'fit' needs to be applied. It offers a framework for organisations to consider approaches to organisational change which may be more effective. It suggests that there is no one 'best' strategy or set of management programs. Instead, each company needs to foster its own approach to environmental management. To do this, managers must evaluate external factors, such as the demands, constraints and opportunities presented by the organisational context, and internal factors such as the organisational structure, company history and culture, products, manufacturing processes, available resources, and individual employees. It must match external pressures and opportunities with unique internal characteristics. This matching can either facilitate or interfere with strategy implementation. By evaluating organisational components, managers can identify means to enhance strategy implementation, and identify potential sources of failure that could be avoided.

The same considerations can be made for each of the 'substructures' within the organisation. Grouping is a fundamental way to coordinate work in organisations, and though groups may be connected by a number of coordinating mechanisms, they often become differentiated in such things as their goals, time perspectives, personal relations, styles of communication, and decision making processes. These groupings can be product, functionally, or geographically based. Designing strategies and programs without consideration of an organisation's substructures and their respective strengths and weaknesses may also hinder implementation. The recognition of the different substructures, while decreasing uniformity, may lead to a more effective route to environmental strategic change. The adjustment of the environmental strategy for each product unit can expand strategic opportunities in the environmental arena. By adjusting management programs to fit the existing organisational structures of each division, managers can likewise enhance program implementation.

Tailoring Strategic and Programmatic Choices

The Volvo experience illustrates how a company can tailor its particular strategic and programmatic choices to fit with unique components of company organisation. In the following sections we discuss the issues of 'fit' encountered with various organisational components. We identify how these organisational components can differ between substructures, the implementation issues presented by these differences, and then illustrate these issues with an analysis of Volvo's experiences.
Organisational Context

The social, political and competitive context in which an organisation operates often provides the impetus for strategic change by presenting constraints and opportunities. These constraints and opportunities vary depending on geographic location and the specific external group being addressed. Gladwin and Walter identify eight ways in which an organisation's social and political operating can vary in the environmental arena, including: the economic activities, natural condition, human condition, character of environmental problems, social preferences, political processes, policy framework, and policy instruments. Variations between different geographic locations are particularly problematic in the environmental arena, because local regulations can strongly influence organisational operations. Competitive pressures can combine with these complex social and political pressures, adding complexity to the process of environmental strategic change.

When developing strategies and programs, managers need to evaluate the regulatory, social and competitive arenas within each operation. They have to assess the uniformity of the operation across geographic locations and the speed at which the context is changing. They have to identify the parts of the organisation that are vulnerable to contextual changes, and the available mechanisms for buffering the organisation from change.

Volvo

For Volvo, government regulations, environmental interest groups, and local communities all demanded a more proactive approach to environmental performance, and Volvo designed strategies and programmes to address these demands. Some environmentalists even regard Volvo's environmental performance as essential to the environmental movement in Sweden. States Chris Agren, the Swedish Non-government Organisation (NGO) Secretariat on Acid Rain: 'Gyllenhammar has been some type of leader in the country. He is really the most well known industrialist in Sweden and when he holds up the environmental flag, other business leaders pay attention.' Volvo's environmental training strengthened its ties to the environmental activist community by directly including them in this activity.

Nevertheless, not all members of the environmental community support all of Volvo's choices. Agren explains that although Volvo has definitely 'been more thorough than other Swedish companies in trying to be green,' he can still 'see a discrepancy between what they say and what they do.' This is most evident in the area of fuel economy, and he points to the new 850's high power engine as an example of this problem. When he questioned Volvo executives about the 850, they replied that it is what the Volvo consumer wants. 'What they don't say,' he states, 'is that they (Volvo) have a large influence on the consumers'.

In numerous ways, the Swedish regulatory process fits well with Volvo's environmental programs. The consensual nature of the Swedish society, reflected in the regulatory process, enhances this 'fit' because it allows the flexibility needed to investigate innovative solutions to waste minimisation and control. At the Torslanda plant, for example, Volvo was given an extension for a ruling on solid waste limitations in order to investigate possibilities to recycle the waste. Volvo is taking advantage of this extension to try and develop ways to recycle some of the solid waste, and therefore avoid disposal altogether.

Volvo, however, does not just operate in Sweden, and the structure of its environmental programs may not be consistent with regulatory provisions encountered in other countries. In the United States, where the regulatory structure is more hostile and complex than the Swedish permitting process, the plants may find it more difficult to shift their focus away from regulations towards internal goals.

While offering some flexibility in technology choices, the progressive nature of Swedish regulations may have adverse consequences on other aspects of Volvo's business strategy. Other companies, wary of facing similar low plant level emission levels in their own countries, have been reluctant to be supportive of the aggressive emission reduction schedule in Volvo's Torslanda plant. In fact, Volvo employees feel that they have even been excluded from some conferences on paint shop technology for this reason. These lower emission levels also necessitate the use of costly abatement technologies, placing Volvo at a cost disadvantage. For mobile sources, if Volvo chooses to support proposed
Swedish legislation, it will be put in direct confrontation with the European Community, which views these limits as barriers to trade. Threatened by retaliation from the EC through the use of trade barriers, Volvo has opted to oppose this Swedish legislation.27

Organisational Structure

Most companies have already established a formal strategy and structure for internalising and meeting regulatory goals. Companies moving from compliance to more proactive goals, however, may need to adapt existing management structures or create entirely new ones. The structures that have evolved for compliance purposes often do not have the capability or lines of communication necessary for implementing a proactive strategy.

In designing a new structure for environmental management, it should fit with the company’s overall organisational structure. Changing the structure of an organisation is not easy, as it involves the difficult task of changing the individual and group relationships within the company. For this reason, it may be more effective to design management programs within the framework of the overall corporate structure.

When determining the environmental management structure, managers should consider the existing structure of the organisation and the lines of communication that support this structure. In addition, they should try to identify existing substructures, and how they can be utilised to achieve strategic objectives. Organisations evolve slowly, and for good reason, as many of their components play subtle roles and accomplish tacit goals which, when tampered with, make the organisation less effective.

Volvo

The Volvo Task Force introduced new environmental management structures, but proceeded cautiously. It recommended that each company, through the establishment of environmental boards and working groups, add a separate management structure to oversee environmental activities and set environmental goals. While a small corporate environmental office was established with some oversight and coordination responsibilities, it was left up to each product company (e.g. cars, trucks, transport ...) to determine the final structure it would actually adopt. Since each product company is structured differently, so were the final management structures developed for environmental performance.

There was also flexibility in the nature of environmental goals. Instead of having environmental goals set by the Group and Company Environmental Boards, each level of the organisation sets their own goals, a choice that matches the decentralised nature of Volvo. Members of the Volvo Group, for example, such as Volvo Transport and Volvo Data, set their own internal goals based on the specific environmental problems introduced by their products.

The cost for this flexibility, however, is the potential for inconsistent environmental performance. There is already some evidence that management structures vary in their effectiveness across product companies. In addition, this lack of consistency can be observed by reviewing the minimum standards across companies and divisions, which differ in breadth, specificity, and level of performance. These differences could be used by senior management in the centre of the company to produce lower level units to raise their level of performance, when appropriate. Thus, a dialectic is set up with decentralised discretion and variation encouraged, and with sharing of information similarly in place.

Organisational Culture and History

In the environmental arena, some suggest that a drastic change in company culture is necessary for implementing a proactive environmental strategy.28 One drawback with this suggestion, however, is that company cultures are inherently conservative, and are extremely difficult to change.29 Another option for companies is to match their strategies and programs with the existing company culture. This approach has proven to be an enormously important method of reducing the costs and resistance to strategic change.30 This may be a more effective method of implementing environmental strategy than massive cultural change directed at transforming environmental values.
When designing an environmental strategy, the manager should consider the core values of the company, the company’s record on environmental performance and the consistency between the company’s history of environmental performance and its cultural values. Again, all firms have multiple cultures, which are usually associated with different functional or geographic groupings. As Morgan explains: ‘In organisations there are often many different and competing value systems that create a mosaic of organisational realities rather than a uniform corporate culture.’ For multinationals, these different corporate subcultures often reflect the culture of the host country. To reduce these differences, for example, Japanese companies such as Toyota and Honda screen employees in order to transfer the Japanese management culture to other operating contexts. Managers should consider to what degree cultures differ between substructures. If the culture seems to be homogeneous, and the company culture dominates foreign operations, managers should evaluate how this culture fits the foreign operating context. If the ‘fit’ does not exist, the foreign operations can encounter significant failures.

**Volvo - The Caring Concept**

With Volvo, every effort was made to match programs with the company culture. ‘To understand the change at Volvo,’ states Boethius, ‘you need to consider that as a Swedish company [we] have a certain tradition.’ As an organisation which was in the tradition of making a ‘safe’ car, employees understand the ‘caring concept,’ which is 40 to 50 years old in the company. Explains Boethius, ‘there is a certain caring attitude in the organisation - it’s a backbone of the company...[and when it comes to environmental issues], people react - it is easy to connect the two.’

As discussed earlier, the flexibility of Volvo’s decentralised environmental programmes can only be utilised if there is enough control to ensure that, within their own operating constraints, the participants live up to the expectations of the Volvo Group. To do this, Volvo relies heavily on the active participation of the various companies and divisions, and on more informal mechanisms, such as environmental training and ‘tools’ for environmental decision making, to encourage this participation. Mintzberg notes that, in organisations, training and formalisation are basically substitutes for one another. ‘Depending on the work in question,’ he states, ‘the organisation can either control it directly through its own procedures and rules, or else it can achieve indirect control by ... duly trained professionals.’ By this reasoning, the avoidance of a formal control structure is largely due to the Volvo culture, which, as described earlier, is more conducive to accepting new environmental initiatives via training than by central dictates.

As was the case with Volvo’s operating context, its internal organisational culture may vary across its organisational substructures. In Volvo facilities outside of Sweden, for example, the influence of the Swedish culture may not be as strong. For this reason, environmental training may not offer enough motivation to employees, and these divisions may need to adopt more formal control structures to ensure compliance with internal goals.

**Products and Processes**

The products and process used by an organisation can vary significantly in the amount they contribute to environmental degradation and where in the product life-cycle they present the most danger to the environment. Companies must decide whether to maintain, adjust, or replace products and processes to improve environmental performance. Companies are limited, however, by product strategies that make it difficult to implement their environmental strategies. They have to have enough flexibility to alter their products or processes to take advantage of evaluations of the life-cycle impacts of their products. In addition, public and consumer demands may focus on less damaging portions of the product life-cycle, and run counter to scientifically proven improvements in environmental performance. This creates another serious challenge in communicating to the public actual risks and company decisions based on these life-cycle evaluations.

Managers have to determine if certain products and processes are more environmentally problematic than others, and the ease with which the company could eliminate and reduce environmental waste, prevent pollution and improve the environmental performance of their products. These considerations should also be weighed against the focus within the product life-cycle of public and consumer demands for improved environmental performance.
Volvo

Volvo’s strategy and programs targeted all areas of the product life-cycle, as can be seen by the breadth of environmental issues covered in its environmental goals. The new 850, for example, was designed with a ‘holistic’ view of its environmental impacts. Designers tried to address a number of environmental problems that occur throughout the life-cycle of the car, including production, use, maintenance, and disposal.

To achieve optimal ‘fit’, product and process improvements were designed to be consistent with the dominant environmental concerns of the geographic regions in which vehicles were being sold. For the automobile, demands for performance such as increased fuel efficiency, lower emissions, and lower contribution to post consumer waste have varied between geographic areas, as did Volvo’s product and process choices for these areas. For the truck company, social demands differed, requiring another focus for environmental activities.

Resources

As with any strategy, the ability to invest financial, human, technical, and information resources into environmental activities can dramatically influence implementation. Resource allocation is especially problematic for environmental investments, because they often do not offer short term financial pay-backs when measured by existing accounting procedures. As a result, environmental investments have a hard time competing with projects that offer more immediate returns on investment. This problem is compounded by the fact that managers who make environmental investments are not responsible for the consequences of poor environmental performance when making investments. To address this problem, some organisations are attempting to develop accounting procedures that are sensitive to the long term financial, environmental, and social costs and benefits of investment decisions.

Of interest to the manager is the quality, quantity, and the flexibility of these resources. To implement an environmental strategy, the manager should identify the manner in which resources are allocated, the criteria used for investment decisions, and the variability in availability and nature of the resources.

Volvo

In the mid eighties a low dollar and a high SEK increased Volvo’s profits and ‘formed a basket of currency’ for the company, allowing the program to get off to a strong start. This included large and innovative production and product changes, such as the new paint factory in Torslanda, which cost the company 1.8 BSEK (approx $270 million), new technologies to reduce solvent emissions as the Umeå plant, which cost the Truck Corporation 200 MSEK (approximately $30 million), and the removal of CFCs from the 850, which cost approximately 100 MSEK ($15 million).

This financial trend was reversed in the late eighties and 1990, and while Volvo continues to invest its profits from the eighties, financial constraints are starting to become an obstacle to programme implementation. The flexibility of the management programs at Volvo has allowed each company to accommodate its environmental activities in accordance with these new financial constraints. This has meant a shift in environmental activity from actual capital investments to less costly monitoring, planning and preparatory activities designed to create a platform for future environmental improvements.

Conclusions

The framework that we have outlined suggests that strategy formulation and implementation cannot be designed in a vacuum. This process requires a comprehensive examination of company characteristics, including organisational structure, culture, history, resources, products, processes, and individuals, as well as focus on the demands, constraints, and opportunities presented by the organisational context. Although most companies need to adopt new environmental management systems, they can facilitate the process of change by selecting options which fit with existing organisational components. This type of guideline should not be foreign to managers. It has been
offered in the past with respect to other policies and programs. It is generally recognised as an important component in effective strategic change. In the environmental arena, however, the pressures for uniformity, stemming first from regulation and then from internal company insecurity and professionalism have tended to blunt the proper application of the well known principle of 'fit.'

One complication in finding this 'fit' is when there are variations in the components of the organisational substructures. Companies attempting to implement a proactive environmental strategy may encounter difficulties when individual business units vary in their environmental performance. Their performance can vary because of differences in commitments and capabilities. Such variance can undermine a company's credibility with environmental groups and regulatory authorities. Multinational companies confront another problem when social and regulatory trends in their home country dominate corporate activities worldwide, making them less responsive to the needs of the operating context in the host countries. This has caused problems for managers because they have misread growing public and regulatory demands in countries that are taking environmental initiatives. Alternatively, foreign operations may be dominated by the host country, leading to undesired inconsistency in company activities. Addressing these different substructures is a necessary ingredient in effective implementation.

To handle these variations in culture or operations, Mintzberg suggests that companies might create management systems that accommodate these differences. 'Disparities in the environment encourage the organisation to differentiate its structure, to create pockets to deal with different aspects of the environment ... Each [substructure] is given the power over the decisions required in its sub-environments.'

To foster successful environmental performance in these 'sub-environments,' organisations should design around what Gareth Morgan refers to as 'the principle of minimum specification,' in which managers and organisational designers should primarily adopt a facilitating or orchestrating role and create 'enabling conditions' that allow a system to find its own form. This offers a great deal of internal flexibility needed for operating in a rapidly changing world. Morgan suggests that if one is to adopt an organisational structure which is based on this principle, direction and coherence must come from the group members themselves as they set and honour the shared values and norms that evolve along with the changing circumstances. Shared values and norms, adapted to unique conditions then become central operating and control devices.

An organisation's culture, as our research shows at Volvo, can be used to shape the design and implementation of environmental programs. Volvo was able to build upon a preestablished culture of addressing social concerns, especially safety. Its leadership's commitment to environmental improvement, moreover, was widely shared by its employees and the communities in which it operated. As a result, its programs could rely on few formal control structures. This does not mean, however, that a strong corporate culture is necessary for effective strategy implementation. It is more important, as Kotter and Heskett suggest, that the culture fit with other organisational components. They state: 'strong cultures with practices that do not fit a company's context can actually lead intelligent people to behave in ways that are destructive - that systematically undermine an organisation's ability to survive and prosper.'

It is important to recognise that 'fit' is not a static concept, and that besides managing larger shifts in organisational strategy, the task of leadership is to strive continually to maximise this fit by maintaining alignments among the various organisational components. For this reason, environmental management systems should be designed so that they are easily adaptable to changing conditions. This theory is supported by Kotter and James' research on corporate culture. They report: 'our research shows that even contextually or strategically appropriate cultures will not promote excellent performance over long periods unless they contain norms and values that can help firms adapt to a changing environment.' The same findings have been found by Mintzberg for company structure, where the more dynamic the environment, the more organic the structure, where an organic structure is one which is adapted to unstable conditions.
Issues in the Implementation of Proactive Environmental Strategies

Notes


4. The consequences of the Bhopal disaster of Union Carbide illustrate the magnitude of the costs of poor environmental performance. Faced with millions of dollars of potential liabilities for the accident, Union Carbide stock price fell, inviting a hostile takeover attempt. To forestall a takeover, Carbide was forced to divest itself of major business assets. (Cornelius C. Smith, Vice President, Health, Safety and Environmental Protection, Union Carbide Corporation, Interview with James Maxwell, Cambridge, MA, 19th April 1990); Christopher B. Hunt and Ellen R. Auster, 'Proactive Environmental Management: Avoiding the Toxic Trap', Sloan Management Review (Winter, 1990), p.16.

5. James Maxwell, Sandra Rothenberg, and Alfred Marcus, ibid.


7. Because of changes in exchange rates, the numbers given in US dollars are approximate, and are based on an exchange rate of 1 SEK = $0.15.


13. ibid.


29. Studies indicate that the single most important factor which contributes to successful cultural change is strong leadership from top management. (John P. Kotter and James L. Heskett, Corporate Culture and Performance, New York: The Free Press, 1992), p. 84.
38. Gareth Morgan, p. 102.
39. ibid.
41. ibid.
42. Henry Mintzberg, p. 27.