THE ROLE OF CORPORATE FORESIGHT IN PROMOTING SUSTAINABILITY

In this article we want to give our answer to the question about if and how corporate foresight can increase the likelihood that we move toward sustainability — both on a company and a societal level. Before entering into the discussion of what corporate foresight can do, let us highlight some of our observations on what is holding us back from engaging in sustainability actions, and thus creating sustainability of the necessary trajectory, scale, and velocity to actually meet the societal challenges.

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From a humanistic point of view, it seems surprising that we continue behaving — individually and collectively — in ways that will endanger the life of future generations. But the world is slowly moving in the right direction, supported by a broad group of stakeholders. In its latest report, the United Nations Secretary-General's High-level Panel on Global Sustainability seems to shift its focus from governmental initiatives toward action by companies and individuals. Overall, the expectation seems to be that while governments find it difficult to commit to new sustainable measures, companies and individuals could lead the way toward a resilient planet (United Nations Secretary-General's High-level Panel on Global Sustainability, 2012).

Companies' ambivalent role toward sustainability

In a recent study, KPMG argues that firms will need to work harder to become greener in order to prepare for rising environmental cost. However, many firms still find it difficult to engage in meaningful and lasting sustainability programs. When asked about the reason, some suggest that many firms follow the logic put forward by Milton Friedman that "the social responsibility of business is to increase its profits." Using that credo, firms — it is suggested — will only find interest in sustainability if an impact on profit can be expected. Many sustainability innovations, however, have a mid- or long-term payback horizon. Using traditional management metrics — such as calculating the return on investment, on the basis of discounted cash flows — would force executives to make negative investment decisions. Firms are also bound by dominant mental models, basic assumptions that have been developed in the past, as well as by the current business environment. Firms find it difficult to perceive and act upon new trends and changes regarding developing trajectories.

Another issue is the systemic nature of many sustainability innovations. Mark Johnson and Josh Suskewicz argue in a Harvard Business Review article that a clean-tech economy requires "shifting from developing individual technologies to creating whole new [value creation] systems." Such shifts have happened in the past, for example the shift from candles to electricity as the dominant form of lighting. Such a shift makes old value networks (candle producers, candle-holder manufacturer, candle vendors, etc.) obsolete and new value networks need to be formed (energy producers, wire manufacturers, light bulb manufacturers, etc.). Thus, such shifts only come about when multiple actors — often governments as well as firms, consumers, and investors — pull in the same direction and work toward a common goal.

To ensure innovation toward sustainability, three things are needed: (1) decision-making tools that identify future value networks / systems; (2) common visions that identify the value-creation potential to mobilize sufficient resources; and (3) frameworks in which the actors can organize and build confidence that the new value network will be created.

There is, however, a much less debated barrier, which is also much more operational and much easier to overcome, in theory. That is the lack of joint planning and, thus, the lack of shared understanding about what actions need to be taken and in which sequence the different actors need to take them. This is a result of the ways that firms organize. They are complex, with responsibility being shared across many hierarchical levels and often distributed across regions and/or product categories. In addition, they are structured to ensure efficient operations in the current business logic, not in a new (for example, more sustainable) way. Both the complexity and the focus on current business methods create a powerful inertia that is difficult to overcome and systematically prevents planning of alternative trajectories.

Thus, enabling corporate sustainability will also require reviewing organizational design to a certain extent. This includes adapting reward and recognition systems, human resource management, and organizational structures. In addition, the usage of information and communication systems can increase participation in strategy formation and help track the implementation of the strategy.

The three elements of change

Michel Godet and Philippe Durance turn to the Greek philosophers to make their point: To engage firms — and indeed the society — into making change, the three elements of the Greek triangle are needed (Godet and Durance, 2011):

Logos: thought, rationality, discourse

Epithumia: desire in all its noble and not-so-noble aspects

Ergo: action or realization

We use Figure 1 to illustrate how these three elements guide corporate foresight in overcoming the barriers to a sustainable future.

What corporate foresight can do for firms

Firms are employing corporate foresight for different purposes that reach from identifying emerging issues to enhancing strategic decision-making. Corporate foresight is built on the principles that:

- we cannot predict the future, but we can explore possible futures;
- the future is determined by many influencing factors, including own action;
- the generation of insight into the future needs to be integrated with the conceptualizing and planning of responses;
- exploring the future calls for tools that go beyond linear reasoning toward systemic observations and modeling;
- approaches should be participative and challenge dominant mental models and basic assumptions.

However, in many firms the full potential of corporate foresight remains unexplored. The majority of firms use foresight techniques as early warning systems for emerging issues, rather than as platforms to facilitate strategic conversations, create common visions, and plan jointly for how to reach them. This is where corporate foresight methods work best, such as scenario analysis, backcasting, and roadmapping.

THE GREEK TRIANGLE GUIDES CORPORATE FORESIGHT AND HELPS TO OVERCOME THE BARRIERS TO A SUSTAINABLE FUTURE

Figure 1

Barriers	Creating change	Corporate Foresight
Lack of perception of long-term trajectories of change	**Logos** Thought, rationality, discourse	Joint trend and emerging issues analysis
Lack of decision-making tools that integrate systemic effects		Business modeling to identify future value creation networks
Lack of shared understanding what actions need to taken	**Ergo** Action, realization	Backcasting and Roadmapping for planning and controlling progress
Lackof confidence that new value networks will be created	**Epithumia** Desire in all its noble and not so noble causes	Collaborative Business modeling to identify value creation logic
Lack of visions to mobilize needes resources		Scenario to create common shared future outlook

For example, through scenario planning, Shell identified in the 1970s that, in a possible future scenario, the oil-producing countries could jointly decide to reduce the production capacity to exercise political pressure and increase the oil price. This resulted in Shell's anticipation of the oil crisis that has hit its competitors and the world at large, taking them by surprise.

Unfortunately, the management systems of firms reinforce dominant mental models and emphasize shared assumptions, making it much more difficult to think about other possible trajectories. Thus, corporate planning will always tend to strengthen the current path and limit the strategic agility of firms. In that respect, it is important to move from individual trend- and emerging-issue analysis to joint exercises with other companies, for example those from other industries or that have other positions in the value network so as to avoid competitive conflicts.

To break away from such path-dependency, firms are starting to use integrated corporate foresight approaches. These often start with the identification of influencing factors that might be trend-like (with a high likelihood of continuity along its current trajectory) or uncertain (where the future trajectory cannot be predicted at all). The influencing factors are used as the basis for the development of scenarios that are assessed concerning their impact on the firm's current strategies.

In addition, the scenarios can be used for strategic planning. For this purpose, the scenarios are classified into two categories: favorable (where the firm can maintain its competitiveness) and unfavorable (where the firm would lose ground against its competitors). After analyzing the scenarios in depth, the planning can commence from the future toward the present. This technique, known as backcasting, consist of planning actions that need to be taken — starting from the future and working step-by-step to present time. These steps are defined to move toward the favorable scenarios and away from the unfavorable ones.

This approach builds on a high level of participation from the various hierarchical levels as well as different business units to create a shared future vision. To create the understanding of what should be done and how to act, the planning is further detailed using roadmapping, which takes into account the specific perspective of each unit. The participation is essential to ensure the creation of common knowledge about the planned actions, and thus reduces the likelihood of adverse behavior from involved actors.

The wide scope of possible futures identified by scenario analysis motivates firms to take a more long-term view. It enables top management to shift its discussion from "What should we do now?" toward "Who are we and who do we want to be in the future?" Judging from a recent study by Stadler, the focus on core values and having a clear vision about the role of the firm increases its life expectancy. In conclusion, it can be said that corporate foresight provides firms with:

- the possibility to systematically challenge dominant mental models and basic assumptions;
- means to reduce ignorance toward external change;
- methods to recognize the systematic nature of new market development;
- an interpretation and response system;
- a systematic approach to discover alternative strategic options and create shared visions;
- means to counterbalance inertia induced by the management systems;
- tools to break away from path-dependency;
- a method to create a sustainable organizational design for the firm of the future.

Corporate foresight to reach global sustainability goals

When talking about global sustainability questions, we know that we need to get many actors and stakeholders involved. These have complex and often divergent objectives. However, the same is true for most large firms, which are faced with conflicting goals of stakeholders and shareholders, different regulatory frameworks in the countries in which they operate, as well as long-term contracts with buyers and suppliers. To move such complex systems from one state into another requires, in both cases, visions that are shared and strong enough to mobilize the required resources.

To create strong visions, scenario analysis should be the tool of choice. The challenge here is to ensure a sufficient level of participation by the individuals who have the required decision-making powers to commit their organizations to the common vision. In that respect, the World Economic Forum is using a very successful, lightweight version of scenario analysis that can be run as a workshop. Influencing factors are described on cards, whereby stable trends are represented by one card and uncertain developments by multiple cards, and both offer possible trajectories. Sub-groups select cards and create scenarios. All generated scenarios are presented and discussed by the whole group.

For the transition to planning, we have had good experiences in our own projects with collaborative business modeling. In one project, we moderated a group composed of energy producers, energy vendors, ICT service, and ICT manufacturer firms. We organized a series of three workshops, which started with the identification of business model elements and ended with a set of viable business models. The business modeling approach produces more detailed understanding of future value-creation and value-capture systems. This allows for identifying the roles that are needed in the future value network and planning of actions to create the future market. The description of the value creation is also a first strong indicator for the attractiveness of the market, and thus creates the motivation necessary to ensure a sufficient commitment by the participating organizations. In this exercise, we also discovered that the idea of including sustainability goals into the business model was not met with any resistance from the participating firms; in fact the firms were glad to integrate societal impact into the overall business model design. Many firms have indeed embraced the idea of creating societal and financial profit simultaneously, and should thus not be overlooked as partners in creating sustainable solutions for a resilient planet. To finalize the planning, roadmapping is a good tool because it also recognizes the interdependence of, for example, regulatory actions from governments and actions from firms, and thus builds on the same systemic logic as scenarios.

We hope that this article is successful in highlighting some merits of corporate foresight methods and approaches, and that it will thereby result in increased usage for bringing about visions, concepts, and plans for venturing together on the journey toward greater sustainability. ■

Read the full article with additional information on:
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STRATEGIC FORESIGHT: EFFECTIVE DECISION-SUPPORT SYSTEMS

More than ever, strategic decision-makers are expected to develop sustainable long-term strategies for their public or private organizations. Strategic foresight systems support decision-makers in systematically improving the quality of their future assumptions, strategic decisions, and plans. This article summarizes the most important mechanisms of support, presents three distinctive types of foresight systems and widely used methods, and explains how strategic foresight is anchored in actual day-to-day practice.