
Dynamic Strategic Planning in a Professional Knowledge-based Organization

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Abstract

Professional, knowledge-based institutions have a particular form of organization and culture that makes special demands on the strategic planning supervised by research administrators and managers. A model for dynamic strategic planning based on a pragmatic utilization of the multitude of strategy models was used in a small university-affiliated research unit. Working with the strategic planning was well received by the staff, and the research managers gained a good basis for decisions about the future. Key inferences can be drawn from the involvement of staff in strategic planning in a professional organization: 1) the strategic concepts used must be adapted to the specific situation and the specific institution on a continuous basis so the staff accepts the necessity and meaningfulness of strategic planning; 2) the creativity of academic staff members is best expressed throughout the process by repeated written re-formulations of the vision, strategy and action plan of the institution; 3) strategic planning is most meaningful for those who are involved in it, but only the most interested staff members should be involved in the most time-consuming part of the process; and 4) the lemniscatic development method used can help to engage the staff in strategic planning, increasing the legitimacy of the strategy determined for the organization.

Keywords: Research administration; Research management; Strategic planning; Strategy; Vision; Action plan; Professional organization; Public institution; Leadership.

Introduction

"Hitch your wagon to a star," Ralph Waldo Emerson

During the past two decades, research in most of the Western world, especially publicly funded research, has changed radically as a result of greater political interest in the practical value of research, in the effective utilization of limited resources, and in the importance of making research visible to the public (Ernø-Kjølhed, Husted, Mønsted, & Wenneberg, 2001). A new approach to research administration and management is therefore necessary to cope with the increasing focus on the application and capitalization of research, even in university settings (Ernø-Kjølhed et al., 2001). In this situation even small organizations must develop research profiles and action plans that are consistent with their clearly formulated vision and strategy. These tools are crucial for permitting research administrators to improve and promote good quality research and be successful in obtaining grants and contracts for their institutions. However, professional knowledge-based institutions have a unique organizational form and culture that makes special demands on strategic planning (Ernø-Kjølhed et al., 2001; Husted, 2002).

To meet this challenge, research administrators at The Research Unit for General Practice (RU), a small knowledge-based organization, used a model for dynamic strategic planning based on a pragmatic utilization of the multitude of existing models (Ackoff, 1987; Johnsen, 1994; Lynch, 1997; Peters & Waterman, 1982). The methods and experiences that emerged at RU may benefit other research administrators and managers who seek to involve their staff in work on vision and strategy.

Working with Strategic Planning in a Professional, Knowledge-based Organization

A carefully prepared strategy is important to the success of enterprises and institutions (Ernø-Kjølhede et al., 2001), but strategies must reflect the particular circumstances of the individual organization. In 1983 Mintzberg referred to universities as “professional bureaucracies,” in which professionals enjoy a relatively high degree of autonomy in their work and administrative decisions are made on a collegial basis (Mintzberg, 1983). The research staff is hired because of its expert knowledge and, to a great extent, manages itself. For example, the individual researcher is more knowledgeable about the potential in his or her own field (Husted, 2002). As Mintzberg (1989) writes, a professional organization is “the one place in the world where you can act as if you were self-employed yet regularly receive a pay check” (p. 173). This extensive autonomy and specialization pose particular management challenges, as traditional top-down management does not function well in professional bureaucracies in which the staff tend to pursue the interests and values of their professional community rather than those of their managers. How can management involve the staff in the strategic planning of a professional, knowledge-based organization?

Most employees of professional organizations are not accustomed to working with visions, strategies and action plans. In a university environment, most of the staff consists of experienced researchers who are trained and eager to doubt accepted truths. Here, where definitions and models are usually negotiable, care must be taken not to present strategic planning as a set of fixed terms and concepts, as this could potentially create opposition and stagnation. An alternate approach is to employ a strategic planning model without strictly defining the terms vision and strategy. Hence, the staff can make the loosely defined concepts of vision and strategy operational, and develop the model intuitively, rather than within a hide-bound framework. However, the framework cannot be completely discarded, as it must provide structure to the discussion. Keeping the concepts fluid allows the strategy to remain flexible, thus enabling management to act and enable individual staff members to take ownership of the strategy.

The Process of Strategic Planning at RU

About RU

RU was established in 1978, on the initiative of the Danish Medical Research Council. Its mission was to carry out research in family practice and to guide and assist individuals and other institutions that wished to do so. RU is located on the University of Copenhagen’s campus relating to the Section of General Practice under the Department of Public Health. RU’s initiative phase (Glasl & Lievegoed, 1997), when the staff was comprised of only two researchers, lasted five years. A subsequent growth phase was marked by gradually increasing financial resources. In 2002 RU reached a full-time equivalent of 17.4 staff. Included among 35 researchers, many of whom work part-time, are doctors, sociologists, statisticians and nurses. RU is now in a stabilization phase (Glasl et al., 1997), where development is characterized by discussions of values and goals, the promotion of internal cooperative relations, and adjustment to a new, reduced financial and structural framework. Research administration with strategic reflection is vital.

The Perceived Need of Strategic Planning

In 2002, a strategic planning process was initiated at RU. There had been previous discussions about strategic planning, particularly prior to an international peer review of the institution in 2001. At that time, many preparatory meetings were held to clarify concepts such as strategy, strategic planning, action plans, research areas, values, visions and goals. These meetings reflected the underlying engagement of the staff, but a formal structure for the discussions remained elusive. There was a growing consensus, that, to ensure the continued existence of RU, the institution's strategy had to be addressed, but there was no common concept of either the nature of strategy or what was involved in strategic planning. Discussions about values briefly touched on what should be retained and what should be discarded, but without a clear idea of the vision, this work seemed futile. Therefore, a process was initiated with the following aims:

- 1) To prepare a written vision, strategy and action plan for RU;
- 2) To develop awareness of the meaning of vision and strategy among RU staff members;
- 3) To start a process of integrating strategic planning with RU's on-going activities.

The main focus of this paper is on the first two of these aims; the third is touched upon in the discussion.

The Model for Strategic Planning

There are many definitions of strategy (Mintzberg, 1987). Strategic planning for the RU was based on pragmatic definitions (Johnsen, 1994). Strategy was tentatively defined as "the specific development projects that have to be put into effect to realize the desired future state (the vision)," while vision was seen as "a common image of where we would like to be in five years." Thus, the focus in the development process was on strategy as "plan," "positioning," and "perspective" (Mintzberg, 1987), although the project group was aware that strategy can also be perceived as less deliberate—as emergent or a "pattern in a stream of actions" (Mintzberg & Waters, 1985).

During development, a working model with three phases was used (Figure 1). At the start, the tasks were carried out successively, but there was considerable overlap, and the vision had to be adjusted and revised continuously. The strategy was thus continuously discussed, even when the vision had not yet been determined.

First, the institution's present strategic situation underwent a SWOT analysis — Strengths and Weaknesses from an internal analysis and the Opportunities and Threats from an external analysis (Lynch, 1997). The internal analysis employed McKinsey's 7-S-Model (Peters et al., 1982), while the external analysis utilized a combination of a PEST (Political, Economic, Social, Technological) analysis (Lynch, 1997) and a stakeholder analysis (Johnsen, 1994).

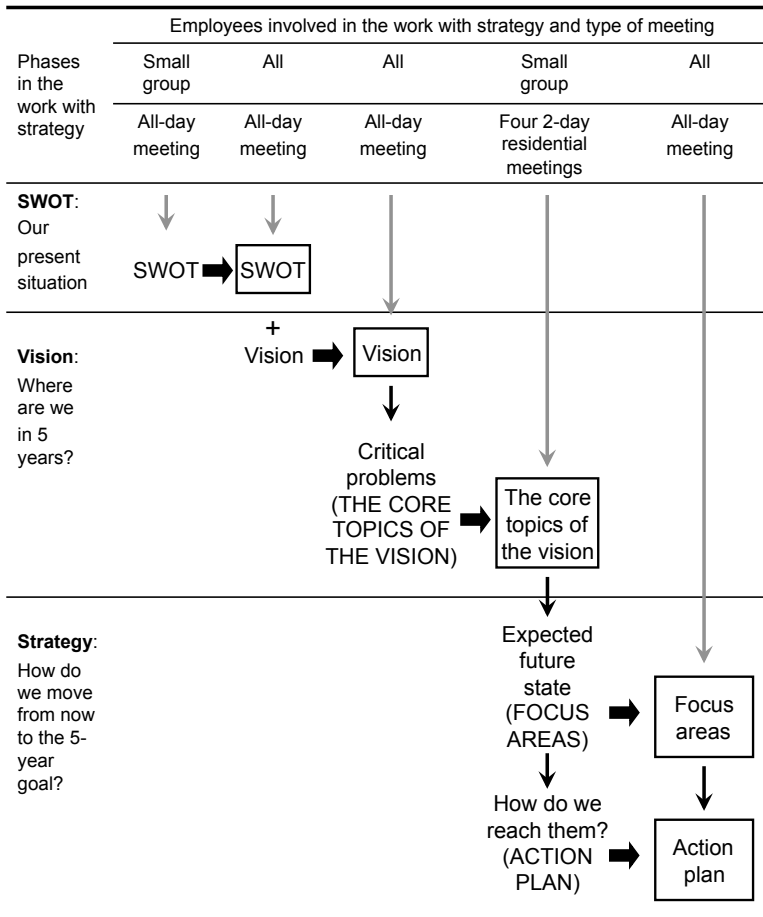


Figure 1. Outline of the implemented strategic planning.

Next, the vision anchoring the strategy in the future was articulated (Ackoff, 1987). Finally, the strategy was drafted on the basis of the SWOT analysis and the vision. The eventual goal of the strategic planning was to prepare a concrete action plan describing the initiatives that must be taken to achieve the desired future state.

Strategic Planning at the RU

The strategic plan was developed through plenary meetings and meetings of smaller groups of interested staff members, all of which were led by a senior research administrator. The process of planning the strategy is described below, with examples (in italics) resulting from the vision, the strategy, and the action plan.

Meeting in a Small Strategy Group: The SWOT Analysis

The strategic planning process began by inviting interested staff members to a one-day introductory rapid roll-out of the entire work model (Figure 1). Five volunteers (one cultural sociologist and four physicians) worked in two groups using prepared forms to record the necessary steps to present at the plenary meeting. A research administrator and a secretary recorded the conclusions, which were used to inform each subsequent step in the process. The conclusions were posted on the walls. Figure 2 shows an excerpt of the final SWOT analysis, which proved to be a relatively valid description of RU’s strategic situation. This analysis was discussed and adjusted at later meetings (Figure 1), as political developments in the field necessitated changes.

Internal analysis	<p>Strengths What are RU’s strengths?</p> <ol style="list-style-type: none"> 1. Quality of the research 2. Rooted in clinical work 3. Pluralism of methods 4. Multi-disciplinary 5. Knowledge rooted in groups rather than individuals 7. Good supportive working environment 11. Part of a larger research environment 13. Affiliation of international researches 	<p>Weaknesses What are RU’s weaknesses?</p> <ol style="list-style-type: none"> 1. Difficult to find a balance between research, communication of research findings and other activities in relation to general practitioners 2. Omnipotence - wanting to be involved everywhere! 3. Too few permanent staff and too little funding from foundations 5. Weak personal career planning
External analysis	<p>Opportunities What opportunities has RU in relation to its surroundings?</p> <ol style="list-style-type: none"> 1. Central collaborator for general practitioners with regard to research, quality development and continuing medical education 3. Many areas of contact with other research environments 4. Opportunity for greater professional and political clout as part of The General Practice House 	<p>Threats What are the threats in its surroundings facing RU?</p> <ol style="list-style-type: none"> 1. Political initiatives by the government, regions and local authorities 2. Uncertainty about the consequences of the structural reform 3. Lack of money 7. Lack of general practitioners

Figure 2. *Excerpt of the SWOT analysis.*

First Joint Strategy Day: The Vision

The next step was to convene all RU staff members for an all-day workshop to discuss the SWOT analysis and the vision (Figure 1). Working in small groups, the staff adjusted the SWOT analysis and then focused on the vision. Attendees were asked to formulate a picture of where they would like to be in five years, first as free text, then as a drawing with colored chalk. In the subsequent work, group members first presented their ideas to each other, then extracted the parts of the vision they had in common so they could be presented at the plenary session.

All the posters from the groups remained hanging on the walls after the presentation, and the salient points of the visions of the different groups were summed up at the plenary session. During a lively discussion, the subjects were grouped according to unifying common themes. The group then left it to the research administrator to prepare a short summary of this work. This director's cut of the vision was subsequently sent to all staff members in two rounds. Only minor changes were made. The vision was ultimately described in 23 points, among them the following:

- 1) *We want a dynamic research environment, which is well-known and appreciated.*
- 5) *We will give priority to innovative research, but we will also have room for routine, qualifying contributions to the joint capital of knowledge.*
- 9) *We will integrate the research process with communication of the findings.*
- 17) *We want an environment marked by versatility in the researchers' professional education, interests and qualifications.*

Second Joint Strategy Day: The Vision and its Core Topics

The free-text vision was relevant and created commitment but it was difficult to transform it into operational goals. This was adopted as the theme for the next step in the strategic planning—a workshop to which all staff members were invited (Figure 1).

This work was accomplished as a blend of individual reflections, group discussions and presentation in plenary sessions. First, the free-text vision was revised during lively discussion, and an effort was made to prioritize single points. Research administrator asked the staff members to choose subjects on the basis of the questions: What do we want most? What are we enthusiastic about? The SWOT analysis was employed to narrow the vision by addressing the question: What critical problems are facing RU if we are to move from the present situation described in the SWOT analysis to a realization of the vision? Everyone was asked to look forward five years in time. On the basis of the posters produced by the groups, the analogy of a modern firm developed, with the following core topics to describe the critical problems:

- a. *Research or "production" in the factory analogy*
- b. *Positioning or marketing department*
- c. *Development – internal and external or development department*
- d. *Balance or analysis department*
- e. *Resources or HR/economics department*
- f. *Well-being and internal environment or HR/well-being department*

For each heading the plenary meeting extracted key words and short sentences from the long version of the vision. A small group of volunteers agreed to develop this presentation further.

It was at this meeting that a conscious adaptation of the strategy concepts to the situation and needs of RU began to emerge (Figure 3). This involved connecting the multitude of ideas in the vision to an operational action plan that could be accepted and understood by all staff.

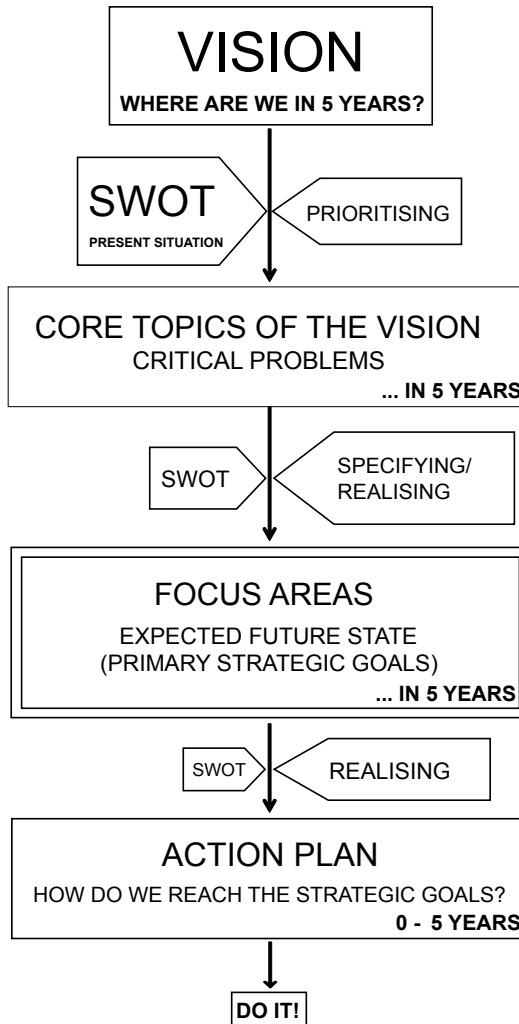


Figure 3. Strategic planning from vision to action plan.

Four Residential Meetings: The Core Topics of the Vision and RU's Focus Areas

The small strategy group consisted of four physicians, a sociologist, and a secretary. During four two-day meetings (Figure 1) this group framed each of the six core topics from the second joint strategy day within the light of the vision, the SWOT analysis and the other core topics. They grouped resources, well-being and internal environment together in one topic, but it was clear that the five resulting core topics were closely connected and overlapping. A need arose for the use of imagery—in a two-fold sense:

RU's vision can be regarded as a picture, where the motif (RU's professionalism), is comprised of three closely linked core topics (Figure 4). Outside this, the group put passe partout and a frame which either emphasized or toned down the single elements in RU's motif. The frame represented the prioritizing made necessary by the number of conflicts of interest between the individual parts of the motif and between the motif and the passe partout. The passe partout denoted RU's resources. RU's professionalism was thus in the middle, and around it lay the resources encircled by priorities (Figure 4).



Figure 4. *The core topics of the vision as a fine picture.*

During all four subsequent residential meetings, the motif, passe partout, and frame were further elaborated according to the model in Figure 3. The vision and the SWOT analysis were brought into this process and the individual parts of the vision (the picture) were allowed to interact, all with the purpose of clarifying the core topics of the vision to select focus areas. The following are examples from the wording of the three different dimensions in the vision:

Professionalism: In 5 years we will engage in high-quality research, i.e. independent, clinically relevant, interdisciplinary research, research that develops theory and method...

Resources, well-being and internal environment: ... *In RU every person will contribute to a safe, inclusive, stimulating, and debating environment, which will succeed in recruiting new researchers, retaining experienced researchers and training leaders...*

Balance and prioritizing: *Due to limitations of time and resources, we will constantly prioritize between the many task ... With regard to research, research supervision and development, choices will have to be made between research fields strongly rooted in family practice versus those with roots in interdisciplinary subjects; clinical research vs. theory and method generating research, quantitative versus qualitative research...*

The final task of the small strategy group was to move from the intentions in the vision and strategy statements to selecting focus areas for the action plan. To avoid the selection of too many focus areas, the group established two new areas, “observation and maintenance areas.”

The eight selected *focus* areas were those from the vision that should be realized within five years, and which would require special efforts. Examples included: *Theory and method-generating research, Implementation research and process research, and Tutorial pedagogy.*

Observation areas would not be immediately selected as focus areas. However, because developments could create obstacles to realizing the vision, there was a need to continuously monitor the three chosen areas to determine whether they should be selected as focus areas (*fundraising, for example, and the political importance of RU's work for family practice*).

Activity levels within the seven *maintenance areas* were deemed adequate to realize the vision. Among the areas that required only careful maintenance were

- *Ensuring backing from family practice*
- *Attracting and retaining family practitioners as researchers in RU*
- *Interaction between disciplines*

Third and Concluding Joint Strategy Day: Action Plan

The preliminary list of focus, observation and maintenance areas derived from the small strategy group was adjusted at the last all-day meeting for all staff members (Figure 1). This final adjustment was done not on the basis of a systematic selection from the SWOT analysis and vision, as in the small strategy group, but more intuitively. For example, staff development, and in particular career planning, had a more prominent place, communication and highlighting the work of RU became a new focus area, and fundraising became a new observation area. In this way, the staff took ownership of the new list and was prepared to proceed with the action plans on the basis of the eight focus areas.

Before this final joint meeting, the small strategy group had prepared ideas for an action plan for most of the focus areas. At the joint meeting, more work was done with the action plans in four groups, and each group drafted an action plan for two focus areas. The small strategy group subsequently assembled these plans and added a tentative order of priority of the planned activities by drawing up three- and five-year targets.

As an example, the action plan described the following three-year targets for the focus area “theory and method-generating research:”

Internal training and support: A seminar will be held on the subject “theory and method development in the current projects...”

External training and support: ... Interdisciplinary networks with relevant researchers will be established ... More priority will be given to cooperation with the educational research institutions...

The Provisional Conclusion of the Strategic Planning

The finished strategy report was presented to and accepted by all staff members. Three years after its conclusion, the strategic planning process was revived by management. Approximately one-half of the three-year targets of the deliberate strategy had been reached, and new targets in an emergent strategy had been developed and reached.

Discussion

It is important to adapt strategic planning to the interests, backgrounds and engagement of staff members. In a knowledge-based organization such as RU, this meant that many resources had to be employed on the written formulation of the vision, which in turn meant that it also became excessively verbose. Consequently, the route from the vision over core topics and focus areas to action plan (Figure 3) was long and indirect. However, this was not necessarily a disadvantage to strategic planning. Under the direction of a senior research administrator, staff members experienced the strategic planning process as a meaningful endeavor in which they could both make use of their qualifications and influence the process and the product. The precondition for this outcome was the balance between using the pragmatic, tentative models and allowing room for deviations from the charted course, reformulation and repeated re-evaluations of previous decisions (Figure 3). In other words, it was important to find a balance between what is planned-conscious on the one hand and what is impulsive-intuitive on the other (Figure 5) (Bos, 2005). During the strategic planning at RU, all those involved experienced how, at all stages in the process, new questions or obstacles arose which, in a lemniscatic, repetitive, flowing movement, necessitated returning and finding new facts or new common understandings (Figure 5) (Bos, 2005). Reality is created in the present, where questions are posed and strategic planning is done, and where the past (the SWOT analysis) and the future (the vision) meet (Andersen, 2001; Cooperrider & Whitney, 1999; Barrett, 1995). People are more confident in journeying into the future if they can take something of the history, especially the best of it, with them (Cooperrider et al., 1999). The working model for dynamic strategic planning in Figure 5 was presented to the staff by the senior research administrator at an early session; although not referred to regularly, it was the principle driving force of the strategic planning process.

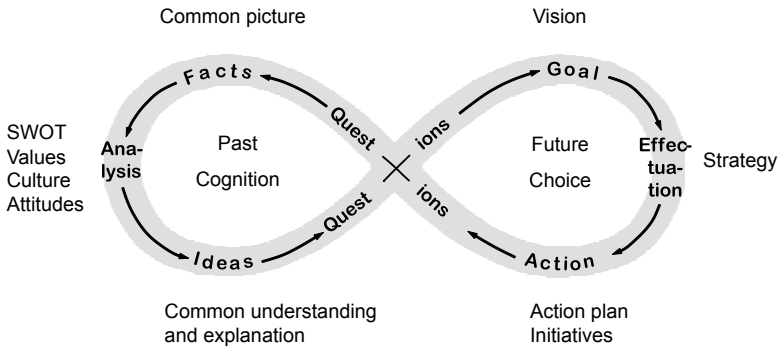


Figure 5. Dynamic strategy planning: The lemniscatic model.

Strategic planning must be scaled according to the size of an organization. RU's strategic planning involved the staff members for a period equivalent to one person employed full-time for six months. This time was evenly divided between meetings to which everyone was invited and meetings in small strategy groups. It is important to involve staff members who want to make a continuous contribution. At the same time, paradoxically, it seems to be crucial to strategic planning that as many staff members as possible are involved at an early stage (Lawler, Mohrman, & Benson, 2001) to enable them to take ownership of the vision and the strategy. In the interaction between the contribution of the many and the few, openness and transparency about decisions and choices are important. Therefore, comprehensive reports were written after every strategy meeting and distributed to all staff members.

Employees of knowledge-based organizations have always worked on an uncertain basis because their work has creative and developmental elements, which makes it difficult to predict both the direction and the results (Husted, 2002). The provision of resources and political priorities also affect the research sphere in an unpredictable way (Ernø-Kjølhede et al., 2001). From the perspective of the research administrator there is a need on the one hand to guarantee the knowledge-workers a high degree of freedom to make individual decisions, and, on the other, to coordinate their individual decisions with the final goal to promote good quality research. Here the process of strategic planning can be seen as an important management tool to construct, communicate, and negotiate a framework for joint decision making in the organization (Ernø-Kjølhede et al., 2001).

At RU the strategic planning based on a dynamic and pragmatic development model was well received by the staff, a way of discussing strategy and strategic planning was developed, and the action plan gave RU management a sound basis for decisions. Furthermore, the latest follow-up meeting discussing the action plan showed that several of the strategic goals had been achieved during the ensuing three years. However, as in many other organizations, translating the strategy into strategic actions throughout the organization on a continuing basis has not progressed as described in the action plan. Among the reasons for this are a sudden change in top-management due to illness, the employment

of new staff members who had not been part of the strategic planning, new developments in the organizational environment that have a bearing on the relative importance of existing elements in the strategy, and the tendency for preoccupations with daily tasks to displace some of the strategic ideas and visions. Therefore, it is now a priority for the management of RU to update the strategic plan by considering new developments in the environment and informal strategies that have emerged in the organization (Mintzberg et al., 1985). This should lead to follow-up activities and consideration of linking the results of this process with organizational structures, priorities and resource allocations.

Lessons and Conclusions

Although it is never a straightforward process to decontextualise local experiences and to translate descriptions of specific processes into general prescriptions, management has learned the following important lessons about the involvement of staff members in strategic planning in a professional knowledge-based organization:

1. Strategic planning is a process that creates meaning. The meaning that is generated for the participants during the process, and to which different words and concepts are attached by the participants, is completely central. The crucial point is understanding what strategy and strategic planning is about, and why they are important for the organization.
2. To achieve acceptance of the meaningfulness of strategic planning among staff members, the strategic concepts used must be broadly and pragmatically defined and constantly adapted to the specific situation and organization.
3. Strategic planning is most meaningful to those who are involved in it. The most interested staff members should be involved in the most time-consuming part of the process while other staff members must be given comprehensive information (e.g., through written reports) and be involved and engaged through joint meetings.
4. Academic staff members' qualifications, engagement and creativity are best set free in a process offering room for careful re-formulations of the institution's vision, strategy and action plan.
5. The lemniscatic development method as a heuristic tool (Figure 5) can help engage staff members in the development process, which is important for creating awareness of the strategic planning and for increasing its legitimacy in the organization.

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