

Stradin: A Strategic Dynamic and Interactive Decision-Making Process

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Abstract

This article proposes a new strategic decision-making process: Stradin. Stradin uses recent developments in computerized network systems and user-friendly interfaces in order to address management challenges of corporations of the 1990s. Five strategic challenges are addressed: (1) finding the right balance in the centralization-decentralization dilemma; (2) conciliating strategic decisions and their operational implementation; (3) finding a balance between role differentiation and integration; (4) using conflict constructively in order to improve decision making; (5) conciliating emerging strategies and continuity. The article below discusses each of these challenges and shows how Stradin can help in meeting them.

Key words: decision making, strategic process, computer network system, Stradin

Introduction

Strategic decision making has gone through several phases during these last 50 years: from the enlightened leadership vision of decision making, through the strategic planning perspective, to the current stage of more decentralized and spontaneous emerging strategy formation. The observed evolution is taking place in reaction to highly formalized approaches. It is justified by increasing knowledge, complexity, and turbulence (Huber, 1984).

Stradin, a method based on a dynamic interplay between actors who can communicate through a distributed computerized network system, facilitates the occurrence of new ways of strategy formation. Stradin, also, is created in such a way as to respond to the new challenges of the 1990s: to provide the right balance between centralization and decentralization, to conciliate strategic decision and operational implementation, to search for an equilibrium between role differentiation and integration, to use conflict constructively in order to improve decision making, and to find a compromise between emerging strategies and continuity.

Challenges are presented below and are illustrated with responses that Stradin provides. Furthermore, a real “in situ” application, as well as a comparison with more traditional strategic decision methods, is discussed.

1. Challenge 1: Finding the right balance between centralization and decentralization

With the broadening of market scope and the internationalization of many business activities, the role of managers has evolved. Line managers are increasingly part of the strategic process because of their potential for identifying opportunities when dealing with operations which are sometimes located far away from headquarters. Because of physical separation from the “center,” we can expect that decision making will be further decentralized and that greater autonomy will be granted to these operations. In the same vein, because of the gap between center and periphery, the speed of communication of strategic information has to be improved if companies want to react effectively to market demands. To do so, managers must be able to assess the strategic significance of information. They also have to have the motivation to transmit it (Narvel and Slater 1990). But what we know is that transmission through hierarchical structures tends to distort information, resulting in an important information loss (Woolridge and Floyd 1989). We also know that motivation is frequently weak. Demands for information tend to increase ambiguity, conflict and stress (Dubinski et al. 1990). As Evans and Schlater point out (1985, p. 57), “if companies are truly concerned with the implementation of formal intelligence systems, they should create the appropriate organization set-up...” Here, the organizational dimension of information system design is recognized as being of central importance.

Managing a broader scope of business markets requires a mix of centralization-decentralization. Centralization is necessary for increasing coordination among operational units which are spread apart and for achieving coherence and economies of scale. Decentralization is important for improving sensitivity to local conditions in a competitive market. The architecture of Stradin allows a balance to be achieved between these conflicting demands. It is a strategic decision-making process integrated into a computer network. It enables members of an organization to communicate and make decision in real time.

Stradin is primarily developed to be used in a microcomputer network (PC or Macintosh). However, it can also be implemented on a mainframe accessed through a network of terminals. The software which supports the interactive dialogue between users has been developed with 4 D. Finally, electronic mail is made available to enable organizational actors to interact more informally and freely. Stradin involves five steps for decision making.

(1) Knowledge gathering. Managers freely express their opinion on a proposition of decision. Bias is minimized, since managers make their propositions and comments in natural language. For example, a proposition can be: *within a two-year deadline, reduce our customer dependence through innovation.*

(2) Selection of knowledge. Decision propositions are formalized. The propositions consist of three parts—namely, the context, analysis, and proposition itself. Importance, purpose, and links between items are explained. As an illustration, the former proposition can be supported with several facts and hypotheses derived from the context—fact 1: the

loss of a customer will lead to a loss of 15% in sales; hypothesis 1: the lack of communication between marketing and production might be detrimental to the innovation outcome; hypothesis 2: a new R&D unit could improve communication, creativity, and coordination. As a consequence innovation might improve.

(3) Formalization of knowledge. Phrases are broken down into simple sentences. For instance, they might deal with only one item, or its relative importance, or its links to another item. Implicit rules of collective decision making gradually evolve as the process takes shape. In the previous case, given as an illustration, the proposition has been broken into three sub-propositions: (1) a new R&D unit will be created within a one-year horizon; (2) a new product will be made within a two-year horizon; and (3) a seminar with marketing, production, and research experts will be organized within a month to improve interdepartmental coordination.

(4) Codification process. Specification and validation of the decision context and purpose facilitates codification. This takes place interactively and in a continuous manner. In the preceding example, the finance manager reacts immediately in terms of budget flexibility or investment required, since the creation of an R&D unit has to be planned in the budget.

(5) Results and maintenance. The continuous process creates historical records. Records of past situations can then be used by other company members when confronted with similar strategic decisions. Former hypotheses can be challenged, and new implications can be drawn. Heuristics make it possible to obtain a satisfactory decision at the “right time,” a decision which can be modified later if necessary. Environmental conditions change continuously, affecting strategic decisions. Direct access to previous data and decisions facilitates maintenance.

2. Challenge 2: Conciliating strategic decision making and its operational implementation

Successful strategies depend to a large extent on the quality of operational implementation. The linear strategic process—analysis followed by decision and then by implementation—has to be changed if companies want to conciliate thought and action. A compromise between structured (Glueck 1980; Mintzberg, Raisinghani and Théorêt 1976) and unstructured decision-making models (March and Olsen 1976; Padgett 1980; Starbuck 1981) must be found.

When strategic choices are made, they frequently need to be modified and adapted to the constraints imposed by operational implementation. However, modifications and adaptations tend to decrease the effectiveness of a strategic decision, regardless of its original value (Aaker 1984). On the other hand, a too strong bias toward action and implementation can result in a misleading interpretation of the long-term competitive conditions. As a consequence, it may lead to an underrepresentation of major strategic risks (Staw 1981). For example, when marketing and sales departments are too concerned

with finding the appropriate response to consumers' short-term needs, they tend to forget the corporate strategic perspective (Dess and Origer, 1987). To avoid leaning too heavily toward one of these two extremes—namely, strategies without operational implication or implementation without analysis—strategic decision making must be viewed as a circular process in which operational reality leads to strategic decisions, which in their turn shape operations.

Strategic information systems are rarely designed to satisfy the needs of operations managers. They tend to target the needs of top management analysis and of the control process. Expert systems for strategic decision making are not a satisfactory answer, either. They are aimed at a single decision maker, while strategy formation is a collective process. Multi-expert systems are rare (Pinson 1988). One obstacle to the development of expert systems for strategic decision making derives from the way in which expert systems are designed. Sets of rules are preestablished and are based on a formal reasoning mechanism. They partly cover the knowledge representations which are necessary to comprehend the complex world of corporate strategy (Paradice 1992). Questions to be answered are presented. Rarely, indications are given on the way to create them. But we know that, in the case of strategic decisions, one of the most critical aspects is asking the right questions. The result is a fragmented knowledge base, as the technical constraints imposed by the computing environment overwhelm the requirements of a complex human decision-making process. For example, operations managers' knowledge is enriched when it interacts with information from the competitive environment (Syed and Tse 1988). In the same vein, managers decide and act according to both rational and intuitive rules. They also proceed by deduction, analogy, and approximation. All these peculiarities of a real-life organization are rarely taken into account in traditional computer-based decision-making systems. And, few management expert systems, to our knowledge, exist for the moment (Ernst 1988, Lehner 1992).

Stradin addresses some of these shortcomings. It is not an expert system, because it doesn't simulate an expert's thinking (Hayes-Roth 1988). It is a group strategic decision-making process based on a dynamic interplay between organizational actors who communicate through a computer network. It can either be organized formally during time-constrained sessions or it can be run continuously on-line. In the first case, Stradin is used during specific work seminars lasting one or two days. During these seminars, four groups of experts interact (i.e., make propositions, criticize, evaluate, and, eventually, decide). These four groups—line managers, internal resource managers, environment-interface managers, and top management—work in separate rooms. They are connected through a computer network. They can receive and send formal and structured messages. Informal messages can also be sent through electronic mail. Propositions are analyzed, modified, rejected, or accepted. The session ends when one or more propositions receive approval for implementation. In the case of on-line continuous formulation, propositions can be made at any time and can be dealt with immediately. For example, in the case of an important negotiation made by sales representatives, Stradin can assist in immediate decision making. It supports the direct and structured communication between line managers (negotiators), top managers, resource managers (production, finance, and human

resource departments), and environment interface managers (marketing, legal, and R&D departments).

As an illustration, a large French bank, in the recent past, had to take a position on several issues: (1) how to balance the bank's age pyramid in the future, (2) how to adapt administrative personnel to new job profiles such as sales, financial expertise, etc., (3) how to create an executive pool to fill its future development needs, (4) how to use performance-based financial compensation in a seniority-based system, (5) how to reinforce motivation with nonfinancial rewards, and (6) how to make operation teams more international to prepare the bank for the Europe of the future.

A two-day seminar was organized with 20 participants from operations, staff positions, and the executive committee. After presentation of the above questions to the participants, four groups were assigned to four different rooms which were interconnected with a computer network, and Stradin was run.

3. Challenge 3: Finding the right balance between role differentiation and integration

Strategic decision-making systems must also encompass the complexities of organizational structure and culture (Deshpandé and Parasuraman 1986). Individuals interact, communicate, and argue in ways that are influenced by the structure and culture of the organization (Gregory 1983). However, within an organization, there is more than one layer of structure, and there are often several cultures, each organization having distinctive subgroup cultures arising out of specialization (Wilkins and Ouchi 1983).

Furthermore, styles of decision process differ as a function of the international origin of the organization. For example, in Japanese firms, the search for consensus is traditional. Efficiency is always collectively measured and rewarded (Ouchi 1980). In Western cultures, decision processes are not based on consensus. They frequently engender conflicts (Sussman and Herden 1982). They also tend to inhibit communication and impede the emergence of a shared vision (Ruekert and Walker 1987). However, even though such conflict may be "normal" and even functional, consensus with regard to strategic means and goals seems to improve performance (Anderson 1982; Wooldridge and Floyd 1989). Consensus on "goals" is generally insufficient in that it tends to be achieved too quickly and not to be precise enough. It must be substantiated and focused on the types of action which are necessary to achieve strategic objectives (Bourgeois 1980).

Stradin seeks to harness role differentiation and constructive conflict in order to achieve integration of expertise. The Stradin process involves four groups of individuals (see Figure 1).

These groups interact in the context of a formalized knowledge base which they themselves produce. Each group has a different expertise and a specific task assignment:

Group A "Proposition" (Line Managers): This group is made up of line managers in charge of an operational unit or of a critical operational mission such as product departments or strategic business units. This group makes recommendations concerning their

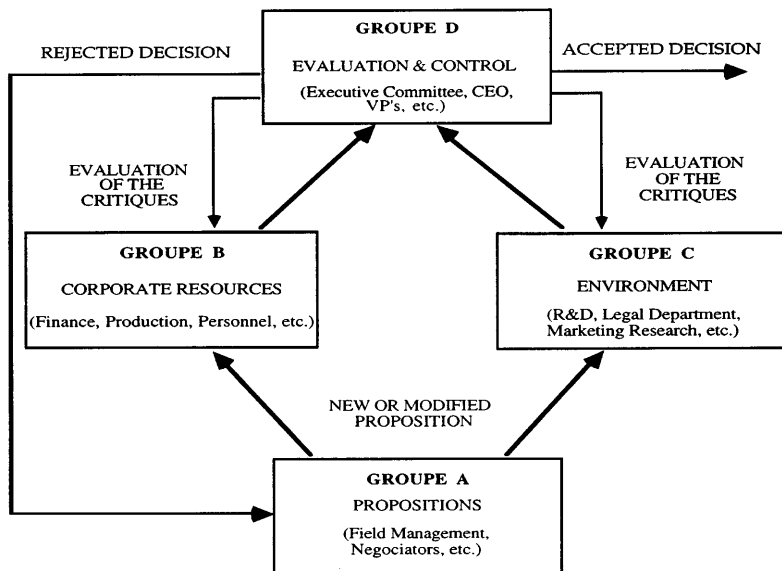


Figure 1. The decision-making process with Stradin. (Other information flows are possible, as discussed in the text.)

operational problems. Its recommendations are based on information which the group has concerning the firm and its environment.

Group B "Resources" (Corporate Resources Managers): This group consists of managers in charge of corporate resources such as finance, personnel, or production. Its mission is to evaluate the internal constraints which could impede or facilitate the successful implementation of Group A's recommendations.

Group C "Environment" (Staff Specialists): This group includes managers at the firm-environment interfaces, such as the legal staff, market analysts, researchers, and planners. Its role is to define all the environmental constraints that might hinder or, alternatively, facilitate the implementation of A's strategic propositions.

Group D "Evaluation" (Top Management): This group is made up of the firm's top management, including the members of the executive committee. On the basis of the propositions of Group A and comments and critiques of Groups B and C, it must decide whether the recommendations of Group A are acceptable. If its evaluation is positive, Group A's proposition is considered as accepted and can be immediately implemented. If, however, it judges that the proposition must be revised, the recommendation is sent back to Group A with adequate suggestions.

The role specialization of the different groups leads to the emergence of different perspectives based on a shared and jointly generated database. Each group has a vision of what is possible and feasible. It can argue, agree, or disagree on what is proposed, and it must justify its position. The different organizational subcultures are preserved and taken into account.

The involvement of organizational actors in the strategic decision-making process should enhance performance. Some authors (Bonoma 1984; Schwenk 1986) argue that increased involvement improves the coherence of implementation with organizational objectives. In Stradin, also, an emergent vision of the corporate strategy occurs. In most strategic decision processes, this is rather difficult to achieve because of the division of work and the hierarchical nature of decisions (Webster 1988). Stradin goes beyond the *motivation-performance* relationships and promotes the *involvement-efficiency* link that Chonko (1986) and Ingram et al. (1989) suggest. Finally, the use of collective and organized decision-making methods—as in Stradin—enables participants to work in an environment of higher consensus, thus enhancing their performance (Nemiroff and King 1975; Hall and Williams 1970).

During the Stradin session, to come to the former illustration involving the French bank, facilitators attended each group to answer clarification requests and to provide technical help through the computer network. During the first session, the facilitators explained the process and the use of the interface forms. Then they let the first proposition be made with the support of their related facts and hypotheses. The distinction between facts and subjective appreciations was not instinctively understood. Facilitators had to

We also know that precise data and opinions are the essential prerequisites to firms' success (Webster 1965; Chonko et al. 1991). However, as organizations become more complex, the amount of relevant information increases and information lifetime decreases. As a consequence, "real time" information processing becomes mandatory.

Stradin is flexible enough to enable immediate information processing. Also, conflict of opinion are gradually dealt with to achieve a consensus. The process is as follows:

- Group A ("Line Managers") makes a proposition that is precise and which it justifies. The Group also describes the underlying conditions for the implementation (facts, data, assumptions).
- When Groups B ("Corporate Resources Managers") and C ("Staff Specialists") receive A's proposition, they analyze it carefully. First, they determine whether or not there is a coherence among stated facts, data assumptions, and recommendations. They must also evaluate the proposition in relation to previous recommendations. In the same vein, complementarities, synergies, independence, and incompatibilities are assessed. Finally, Groups B and C must anticipate the internal and external events that could impede the implementation of the proposition. When all these elements are gathered, Groups B and C assign a "Code" to Group A's proposition: (a) **green code**: approved proposition, immediate implementation is suggested; (b) **orange code**: approved but deferred proposition; modifications are necessary; deferred implementation is suggested; (c) **red code**: proposition not approved; rejection is suggested. The synthesis of Groups B and C is then communicated to Group D.
- When Group D ("Top Management") receives the recommendations of Groups A, B, and C, it must analyze and criticize them. Its decision is final. Three situations might occur: (a) Group B and C's codes are **green**. Group D may immediately accept the proposition that can be implemented at once. Group D may also ask for supplementary information before giving its final approval; (b) Group B and C's codes are **red**. Group D must decide whether the proposition has to be rejected, modified, or reworked. Group D's decision is then communicated to the other groups. Group A may either decide to give up its proposition, to recommend it later when circumstances are more favorable, or to supply new elements to support it; (c) Group B and/or C's codes are **orange**. Group D must decide whether the proposition is acceptable, needs to be modified, or is to be rejected. If modifications are suggested, Group A proceeds in the same way as previously; (d) when all the propositions are analyzed, Group D must record, on a final recommendation form, the assumptions, facts, data, and recommendations.

The confrontation of the propositions with environment- and firm-related constraints (Groups B and C), on the one hand, and with the critical evaluation by top management (Group D), on the other hand, filters the best recommendations from those less likely to be accepted (Mitroff 1982; Mitroff and Mason 1981). Also, since several competing propositions can be made, a dialectical process develops. This dialectical process leads to higher quality recommendations than what can be obtained with other methods (Schweiger, Sandberg, and Ragan 1986). Participation of different actors, each with parochial goals and career objectives, is a realistic representation of decision processes. Political

games between actors are taken into account through the continuous interaction within and between the various groups. As a consequence, conflict is used in a constructive way to achieve consensus. Also, a real-time treatment of information is made, improving organizational reactivity.

In the bank example, one of the main strategic issues was to adapt administrative staff to new job profiles. Four propositions concerning continuing education for a large part of the personnel and for certain target groups, recruiting of young people, and hiring of specialized people were made. For each proposition, however, groups B or C gave an orange code. They argued against because of the importance of the financial resources required and because of the existence of organizational constraints. At this point, participants were fully aware that the evolution and transformation of the administrative staff was a prerequisite for the future performance of the bank in the European context. However, every proposition was evaluated as unsatisfactory until a new provocative idea was put forth: "to lay off 12,000 people from a low productivity area and to recruit better educated, younger people. As a result, Group B gave a red code on the basis of "the social responsibility of the bank" as a given fact, not an hypothesis. Group C, also, gave as a fact "the legal and financial implication arising from a strike which will immediately follow such an announcement." A comment came from group D. It was: "talking about laying off employees is taboo. In the future, we will have to take it into account as a fact throughout all our communication and decision processes."

5. Reconciliation of emerging strategies and continuity

Intuition (immediate unreasoned knowledge) and creativity (potential feasibility of intuition) play an important role in the firm's decision-making process (Braddick 1987). Creativity has to be expressed, shared, and encouraged at all levels of the organization, regardless of the origin of a proposition (CEO or line managers). Also, in complex and uncontrollable environments, individuals should be able to react quickly while keeping up with the main strategic objectives of the organization (Mintzberg and Waters 1985). This response capability can be built from collective learning. As a consequence, it seems to us that a satisfactory decision-making process should facilitate collective learning. Ideally, it should be self-learning and self-validating.

The deliberate dimension, for instance, is taken into account when general directions and/or specific instructions are given by the strategic apex to line managers. Emergent strategies arise when operation managers make propositions that are not necessarily in line with the general strategic thrust of the firm. Finally, even though the organizational hierarchy is preserved, Stradin participants tend to transcend their role. The dialectical process in which they are involved pushes them to have a broader vision of the situation. Their actions are not circumscribed exclusively by their hierarchical role—they act as individuals, as group participants, and as members of the organization.

The continuous process that Stradin proposes provides an opportunity to organizational actors to continuously validate their propositions and learn to improve them until they are sufficiently developed and robust. For example, it is possible to distinguish between facts

and working hypotheses and to evaluate the feasibility of implementing what is proposed. Thus, while Groups B, C, and D examine Group A's proposal, the latter continues to work on a new proposition. Consequently, a continuous flow of propositions, counterpropositions, and critiques circulates among the diverse groups. Here, problem resolution and recommendation are not performed sequentially. In the same vein, formal and informal information flowing between and within the groups tends to create a circular dynamic in which each actor can, at any moment, provide new elements. Any group may make propositions or counterpropositions that are evaluated in the same way as group A's propositions. The objective of the interactions is to achieve a holistic vision of a situation where the different actors do not decide on an isolated recommendation, but take into account its relationship with other propositions. Participation of the different group members in the decision-making process reduces the resistance to the implementation of the decisions. No proposition is definitively rejected, and each can always be suggested again, accompanied by new arguments and information. The temporary rejection of a proposition has to be done with broad and full justification.

Two additional points are worth making. First, informal, as well as written, information can be exchanged. For example, Groups A, B, C, and D may exchange information informally. Similarly, Group D may communicate information to one or several groups. Second, Groups B, C, and D may also make recommendations. When these recommendations concern line operations, they are communicated to Group A, which has to "sponsor" it before it is subjected to the normal evaluation process.

The Stradin process ends when all propositions concerning a given strategic option have been examined. Computer records of all the propositions and related analyses allow a synthesis to be made in a single document to which actors may subsequently refer. These records of individual and group behaviors permit individuals or groups to evaluate themselves in light of information that subsequently becomes available, thereby promoting individual or group learning. All documents generated during a Stradin session can be kept in a "knowledge base." Later, this can be stored and modified, depending on the environment and organizational changes.

During the bank's Stradin session, a set of 15 accepted propositions (ready to be implemented), was made. About ten other propositions had been temporarily rejected and needed to be reworked after more investigations. Seven other propositions were definitively rejected, because they were inconsistent with the bank's strategic orientations. Consensus among participants about these results was high, as was their satisfaction. It can be illustrated by comments such as: "Stradin took us step-by-step and prevented us from missing important issues," and "it allowed us to proceed incrementally. The big frame came later."

6. Concluding comments: validation, limitation, and extension

Validating a new system is usually done by laboratory tests, field research, or a combination of both (Schwenk 1982). Stradin has been tested in laboratory experimental conditions and evaluated in a real organization (Bergadaà and Thiétart 1992). First, a labo-

ratory experiment involving nine groups of MBA students was run to test the method's effectiveness along seven dimensions: numbers of assumptions, internal consistency, external consistency, feasibility, overall performance, participants' satisfaction, and acceptance of group decisions. Second, two sets of clinical observations were performed in a large French bank.

In the laboratory experiment, Stradin was compared to Dialectical and Devil's Advocate approaches along the seven dimensions above. These methods were selected, because they are frequently proposed or used to help managers for making strategic decisions. Group techniques such as the Dialectical and the Devil's Advocate approaches rely on a constructive group conflict process, forcing actors to justify, evaluate, and criticize assumptions and propositions (Cosier 1978, 1980; Cosier and Aplin 1980; Cosier, Ruble, and Aplin 1978; Lourenco and Glidewell 1975; Mason 1969; Mitroff, Barabba, and Kilman 1977; Schwenk 1982, 1984; Schwenk and Cosier 1980). Stradin has been found equal or superior to these two other methods in terms of the number of generated assumptions, internal consistency, external consistency, feasibility, and overall performance.

We believe this higher performance to be a sign of the greater realism of the method, as compared to the other two. Furthermore, Stradin participants were more satisfied with their work in the group than Devil's Advocacy participants and less satisfied than Dialectical Inquiry members. This was probably due to the tension and frustration created in a Devil's Advocacy approach and to the conflict-charged Stradin process. Even though levels of decision acceptance were similar in the three methods, Stradin participants felt that they had searched for consensus more than the other two methods' participants. Although the Dialectical Inquiry and Devil Advocacy groups were pleased with their recommendations they proved to be the least appreciated by the evaluating external experts in terms of feasibility and overall performance.

In clinical observations, Stradin appears to have forced people to be more synthetic and precise in the formulation of their propositions. Also, it forced them to back their propositions with well argued facts. Learning how to use the process proved to be rapid. The relatively long period of time spent on the first proposition was necessary for the participants to get socially and technically accustomed to each other and to the process itself. Clinical observations also show that participants seem to have participated more equally in the decision process than is usually the case in the face-to-face meeting that the organization usually relies on. Also, more daring propositions and comments were made than is normally the case in the organization which we observed. Finally, before the process reached its steady state, several phases were observed: (1) socialization (participants in each group get acquainted with each other); and (2) sensing (participants make a few trial propositions to see how others react); and (3) learning (participants adapt their propositions and the way that they are formulated to the requirements of the other groups).

In the laboratory experiment and the clinical test, Stradin reflected corporate reality, since creativity, political games, and defensive reactions were developed in the process, much as in any other real-life firms. We also observed that strategic decisions were made essentially in an interactive and not always in a sequential manner. In the same vein, we witnessed a real dialectical consensus-building process in which alternative views gradually led to a shared and accepted vision.

Even though Stradin seems promising, weaknesses directly associated with the computerized network must be highlighted. The computerized network, linking the various groups of an organization, should improve communication. However, what was observed was ambiguous. On the one hand, more information was provided by people who generally do not actively and directly contribute to decision making. On the other hand, the information content was poorer than in the usual face-to-face meeting. Also, the computerized network was perceived as unnecessarily constraining and artificial, especially when people were sitting almost next to each other. Computer-based processes seem to be better adapted to decision making where participants are geographically dispersed and cannot rely on a more direct way of communicating.

We think that Stradin might influence the way in which an organization works, even though, as we said earlier, Stradin respects the idiosyncrasies of the firm. Here, it is a matter of degree. Imposing a formal process on participants who are allowed to behave as naturally as possible might have an impact. We also believe that the participatory nature of the process prevents its use in organizational environments where an authoritative style of leadership dominates. It seems to us mandatory to explore the real conditions and prerequisites for successful implantation of Stradin. Furthermore, we have not yet addressed the issue of intergroup dynamics. This issue and its relationship with the intergroup process needs to be studied. Related to this latter issue is the question as to which intergroup processes facilitate or impede the implementation of Stradin. Finally, even though we think that Stradin is flexible enough to deal with a large variety of decisions, it might be useful to determine the kind of problems to which it is not adapted.

Stradin is also a method of internal prospective analysis, respecting the specific dialectical scheme and culture of the firm. It helps in anticipating the risks associated with the implementation of strategic decisions. Furthermore, Stradin seems to have the potential to become a means for obtaining individual and collective adhesion to corporate strategic action. In fact, participants who were involved with this method could be critical and, at the same time, be in agreement with its results. They all know the pros and cons of the strategic choices, just as the decision makers know the specific risks associated with potential opposition from organizational actors.

Finally, Stradin requires the existence and acceptance by the corporation of a micro-computer network as a tool for decision making. It also implies that decisions might leave explicit "historical tracks" where each person's responsibility could be easily identified. For example, in the case of the French bank, it was observed that some participants were uneasy with the information system. They considered the computerized network an unnecessary constraint and somewhat artificial. This negative attitude emerged from the most senior and outspoken individuals: the everyday-life leaders. Furthermore, the experiment left a large number of forms regarding propositions, analyses, and decisions dealing with issues which had been identified at the beginning of the session. Reasons given to support propositions and decisions can be disturbing in an overly informal and political organizational culture. But, if accepted, the transparency would not only be extremely useful for researchers in management but would also imply an important effort to adapt corporate mentalities concerning the matter of confidentiality.

Thanks to its realism and ease of implementation, Stradin appears to be a useful method for the firm. The computerized network linking the various groups of an organization should allow the implementation of a decentralized, flexible, and continuous decision-making process.

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