An updated presentation of the socio-economic management model

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Abstract *This article presents the socio-economic model founded and developed by the author since 1973. It focuses on the fundamental hypothesis of the socio-economic approach to management (SEAM) and demonstrates how the model is a system- wide approach to change management.*

Presentation of the socio-economic theory of organizations: socio-economic analysis, management and interventions

The fundamental hypothesis of the socio-economic theory of organizations

The bio-systemic model of enterprises and organizations operation. The socio-economic theory of organizations consists of integrating social and economic variables according to the following model.

There is an inevitable on-going interaction between the organization structure and the employees' behavior. This interaction is both a driving force, essential to the production of goods or services, as well as the cause of dysfunctions. In other words, it is an explanation of the differences between the observed operations and the operations expected by the actors, who have specific and conflicting objectives.

The organization structures include the physical, demographic, technological, organizational and mental structures. The behavior of actors is influenced according to internal social and economic events by individuals, department, various socio-professional categories, affinity groups (religion, community of practices, lobbies or political parties) and the organization taken as a whole. All this results in intergroup influence on the observed behavior.

Interactive frictions between different kinds of structures and behaviors are causes of multiple dysfunctions classified in six categories: working conditions, work organization, communication-coordination-cooperation, time management, job training, implementation of the strategy. These dysfunctions result in wasted resources (loss of value added) which can be spotted by means of five symptom indicators: absenteeism, work accidents, personnel turnover, lack of quality (products and services) and direct productivity losses. These indicators represent so called "hidden costs" because their impacts on economic performance are neither measured in monetary units

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nor taken into account in the organization management decision. These hidden costs or loss in value added are very high ($1,000 to $5,000 per capita and per year; see Table I) and significantly impact the company sustainable performance both in terms of immediate results (short term) and creation of potential gains (medium and long term).

The model of analysis of the dynamic working of an organization can be represented by a four-leaf clover as shown in Figure 1. The relative

Activity sectors[a]	Hidden costs per capita and per year (€)	Percentage of the payroll (%)
Industries		
Electronics	46,000	220
Metallurgy	18,000	80
Glassworks	38,000	150
Household appliances	12,000	50
Services		
Banking	18,000[b]	45
Maintenance telecommunications	16,000[b]	40
Town councils	8,000[b]	35
Supermarkets	9,000[b]	40

Table I.
Hidden costs are high

Notes: [a] Inter-company comparisons are not significant. [b] Under-estimated within the time allowed

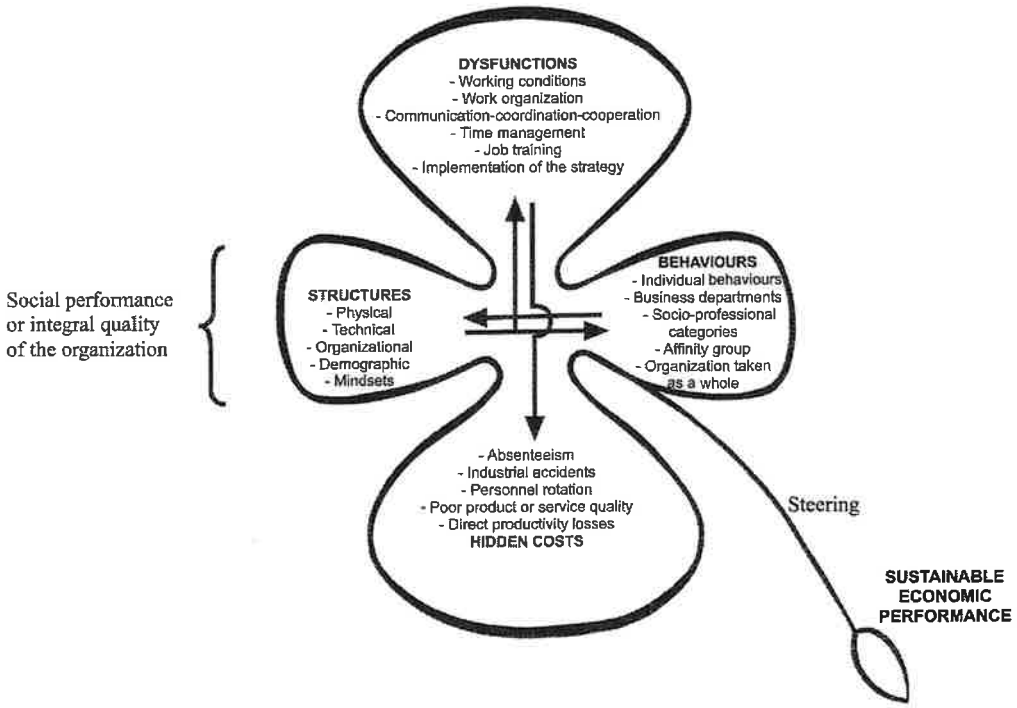

Figure 1.
Socio-economic model of sustainable dynamic working of the organization

degeneration (atrophy) of structures and behaviors leads to bloated dysfunctions and hidden costs, which handicaps the sustainable economic performance. The atrophy may be absolute (deficit of a public or private organization) or relative (insufficient profit of profit-making organizations).

The absolute or relative atrophy of the sustainable economic performance of the organization cuts down strategic forces and impairs the organization capacity to negotiate its survival and prosperity with and within its environment. As time goes by, the present economic degeneration retroacts on the level of social performance of organizations. It leads, in turn to the maintenance or increase of economic performance atrophy during the following phase. Such a perverse dynamic takes the shape of a regressive spiral. Voluntary intervention alone will allow to reverse the trend into a progressive spiral (see Figure 2 and the section on socio-economic intervention).

Sustainable economic performance demands dynamic balancing in time of the social performance/economic performance duality. This duality refines the socio-economic performance of new organizations (the couple dancing together). Social performance designates the organization capacity to meet the needs of the internal and external actors, i.e. its stakeholders (managers, personnel, shareholders, customers, suppliers, and public and private institutions).

The ideal level of shareholders' satisfaction is called ortho-functioning (the opposite of dysfunctions) and corresponds to the integral quality level within the organization. The latter can be measured by the level of dysfunctions observed in the six areas of social dysfunctions.

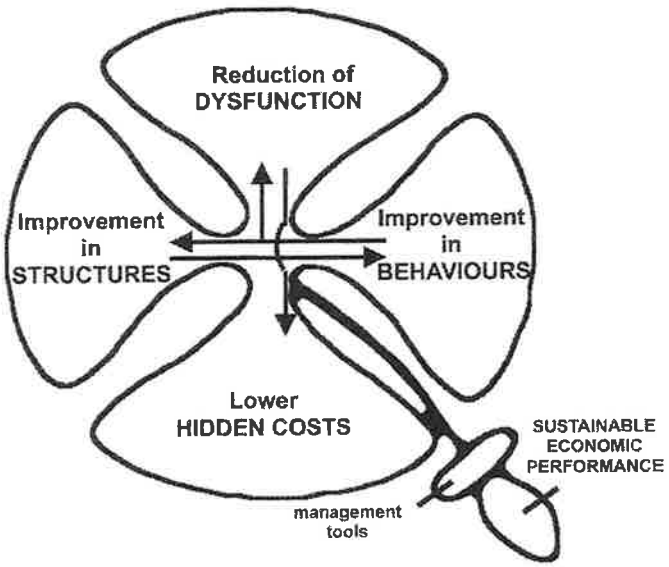

Figure 2.
Socio-economic performances following a socio-economic intervention

Underlying principles of the socio-economic theory of organizations. In an organization the division of labor and the specialized skills of actors (individual and group) provoke actors' scattered behaviors under multiple forms: search for autonomy and lack of coordination in the accomplishment of one's work as well as absenteeism or staff turnover. This propensity of actors to escape is legitimate and natural. It causes a centrifugal movement. The metaphor of professional life, thus offers us the theatre of a symphony to be played but by soloists.

Now the effective and efficient production process of good or services demands the cooperation of a set of actors working in coordination. This implies an integration movement which represents a centripletal and unnatural artifact. Thus the firm is submitted to a permanent dialectical movement of contradictory (centrifugal and centripetal) forces (see Figure 3).

This vital or biological movement provokes alternating conflicts and tensions and cooperation which generate permanent cycles of fluctuations, sources of organizational pathology or even of pollution of the organizational system structure ↔ behavior.

The activity productive of goods or services, commercial or non commercial, is efficient and effective but when there exists a certain level of cohesiveness between teams of actors and of consistency in actions. The sustainable socio-economic performance level depends on the degree of cohesion and consistency

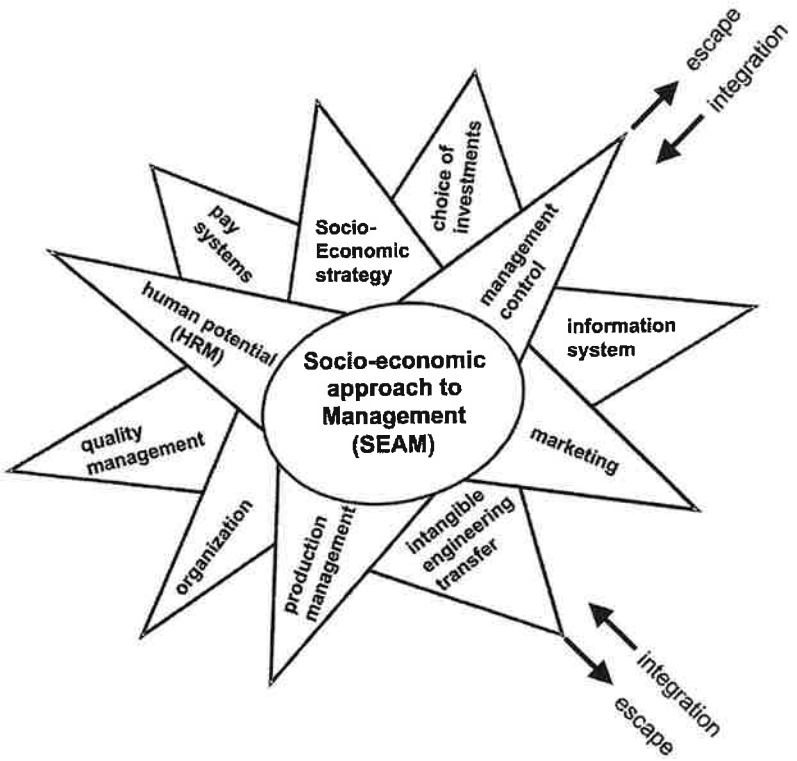

Figure 3.
The SEAM star

of the organizational system. Both are permanently submitted to deterioration by the dialectical movement escape/integration of the actors. The attainment of a performance level does not thus result from a spontaneous state of actors' consensus but, on the contrary, from the organization steering.

In fact, the SEAM model gives an important part to the actors'strategies. All actors have informal powers which they can use, either to contribute to or to detract from the organization's economic performance. The lack of periodically negotiated contracts is related to an underestimation of the state of conflict within the organization. Denying conflict, which is implicit in management theory and in practice, subsequently impacts economic performance.

The lack of dynamic integrated functional and operational human resource information systems (SIOFHIS). The accounting budgetary and financial steering tools are not very well adapted to preventive action, or to organization learning. Consequently, these systems must be supplemented and improved with an information system that takes the socio-economic dimension of the organization into account.

SIOFHIS means that an organization is considered as a functional operational information system which brings about a performance when those informations are assimilated by men and stimulate their action. An organization generates a large amount of non stimulative information which entail hidden costs and are not conducive to economic performance. One of the lever for improving the organization steering is, therefore, the increase in the stimulating information ratio (SIOFHIS principle). The second lever of organization steering and its subsequent performance is the development of synchronization practices of actors in activity processes (synchronization principle). The third steering lever is the cleaning up lever which rests on the following analysis: the organization is a living being which suffers from natural pollution as years go by. Thus the structure ↔ behavior system loses part of its efficiency and efficacy if it is not periodically cleaned up. The discovery and implementation of those three levers in our intervention-researches led us to experiment with management tools whose common characteristic is to allow developing stimulating information, synchronization and cleaning up.

The process which allows to set up those management tools to develop the socio-economic performance of organizations, goes by the name of socio-economic intervention.

The socio-economic intervention

The conception of an organization (structures) does not guarantee the result of its activities. It is the quality of its steering (behavior) which determines its hidden cost/performance level and consequently the level of sustainable economic performance. The attraction exerted over 30 years by the self-organization concept led to discredit the concept of steering which, thus, had to be rehabilitated in the theory of organizations.

In fact, the classical theories (Taylor, Fayol, Weber) as well as alternative theories such as socio-technical systems (STS), insist on the job design factor; they however offer stable and static forms. Now, intervention researches conducted by ISEOR allowed to discover that the job-design model is less determinant as regards performance levels than the variations in job-design. Therefore, the organization change process is the very source of an increase in performance. The quality of the steering of the organization is the key factor of success as regards the improvement in socio-economic performance.

Socio-economic steering includes three levers:

(1) SIOFHIS;

(2) synchronization; and

(3) cleaning up (see the previous sub-section).

In order to improve the socio-economic performance of private companies and public organizations, it is necessary to intervene via the training process which transforms the organization and enables it to become pro-active, i.e. to influence its environment rather than only be reactive.

This intervention consists of implementing three synchronized types of actions.

The transformation process axis (see Figure 4, axis A). It begins with a diagnosis, which consists of the mirror effect of the dysfunctions, a calculation of the hidden costs and an expert's opinion on the unexpressed and root causes of the dysfunctions. This diagnosis enables the actors to become aware of the

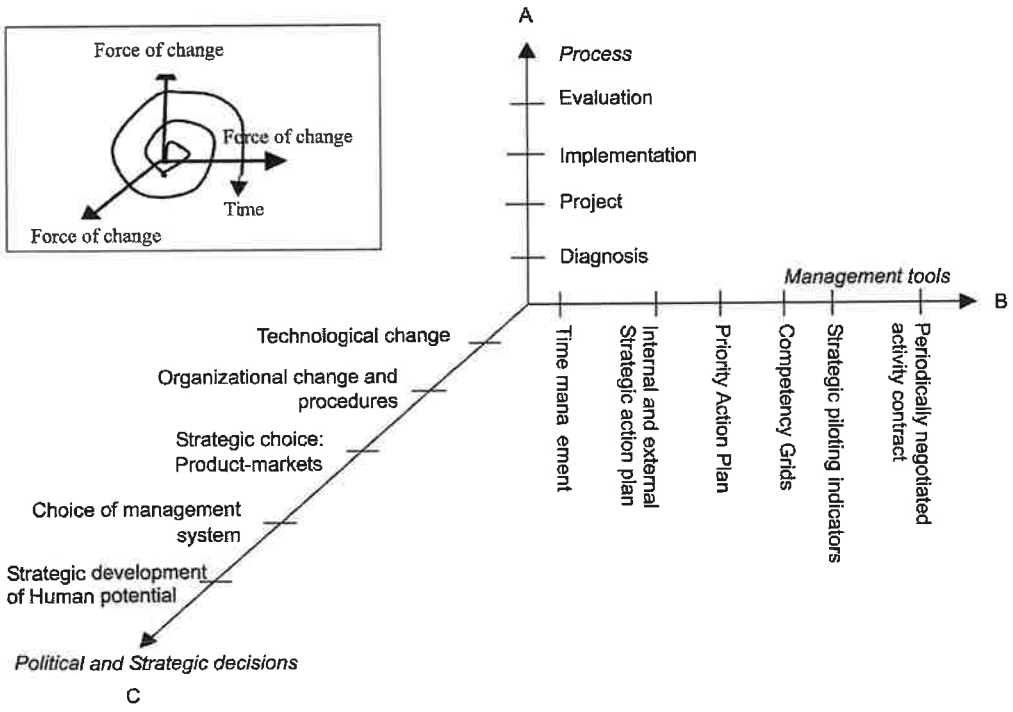

Figure 4.
Synopsis of the three dynamic forces of change

impact of social factors on economic performance. This diagnosis is achieved in a two- to four-month period, through interviews by two to seven intervener-researchers, depending on the size of the organization.

The next step is a socio-economic project, which links, in a coordinated and joint-participative way, the team of actors and researchers to the development of prevention oriented "processes" to eliminate the dysfunctions. The implementation decision as regards this project is taken on the basis of economic balances, where the material and immaterial investment costs of the solutions are weighed against the expected performance, in particular, in terms of reducing hidden costs and enhancing hidden potentialities. After completion, a socio-economic evaluation of the project is made, analyzing the qualitative, quantitative and financial results, thus making it possible to validate the true meaning of the method and to determine the amount of progress which remains to be achieved.

The socio-economic management tools (see Figure 4, axis B). The socio-economic management tools present the following characteristics:

- they facilitate responsibilizing collaborators and stakeholders and the concerted taking of initiatives;
- they stimulate internal and external communication and the actors' implication;
- they develop decentralized economic vigilance (self regulating management control);
- they maintain team-work practices (cohesion);
- they facilitate the periodical evolution of job-design; and
- they maintain the periodical cleaning up of dysfunctions, hidden costs, and of actions which get polluted during the life of the organization: structures and behaviors.

The axis of management tools contains six interconnected tools:

(1) The internal and external strategic plan takes into account not only the external environment but also the internal resources strategies among which the human potential plays a pivotal role in the organization.

(2) The priority action plan, consists of not only unfolding and explaining the overall strategy of the firm down to the operational teams level, but above all makes all the actors join together in the implementation of the preventive actions against possible dysfunctions.

(3) The time management tool makes it possible to balance routine operations, focused on the short term economic performance, with development operations, which is directed towards the long term value added creation. This tool also makes it possible to "clean up" the dysfunctional activities and to reinforce concerted delegation and coordination of the actions.

(4) The competency grid (scale of skills) of a team helps develop skills and polyvalence and thus reduce the team vulnerability. The skills grid is developed side by side with the priority action plan. It is based on the corporate training manuals. This tool enables the management to be associated with the development of the careers of their collaborators.

(5) The strategic piloting indicators controlled by each executive constitutes a kind of radar which enables to check and measure the activities, the immediate results, the dysfunctions and the creation of potential. It constitutes a decentralized tactical and strategic vigilance tool.

(6) Periodically-negotiated activity contracts commit each member of the hierarchy including supervisors, to negotiate with every subordinate the individual and team objectives, as well as the means and the development indicators of the improvement actions of the socio-economic performances. This tool is consistent with the priority action plan and allows the hierarchy to distribute bonuses each semester.

All these tools help reorient the part played by the executives and the management team, further laying more emphasis on the development of the human potential, instead of solely focusing on the short-term economic goals (sustainable economic performance principle).

The political and strategic decision axis (see Figure 4, axis C). Every private and public organization must take political decisions and select strategies which are aligned with their strategic ambition together with the operating rules of the organization. These decisions taken by the management team influence the actions aimed at preventing dysfunctions. The solutions defined during the operation improvement process (process axis) are implemented by using socio-economic tools (management tool axis). The socio-economic intervention helps the actors of the company speed up the policy and strategic decision-making process. It also challenges these same actors to be consistent in their choice.

The dynamic force of change which allows to increase the "sustainable survival/development capacity" of the organization progresses in a spiral (or snail shell) movement from zero point, i.e. the point where the three axes intersect. As time goes by, the socio-economic intervention alternately mobilizes the three axes and move on along each of them. These axes constitute the three energetic forces of change.

HORIVERT method: an architecture to organize space for all the actors involved in the change process

It is necessary to irrigate the entire company, taking into consideration the interaction between the change actions, initiated both at the top and at the various organizational levels (departments, services) or else, the change actions are not likely to succeed, or they might remain stuck in one level of the

company, without any real possibility for expansion. Simultaneously, with the change process implementation, coordinated training is established for all levels of management, the groups are brought together in small clusters, cascading down from the top; they appropriately apply and adapt the socio-economic management tools to their department (see Figure 5).

Chronobiological planning to organize time

An organization is subjected to biological rhythms which take into account activity fluctuations and events due to the dual environment of its internal and external actors. To be successful an action depends on the relevance and efficiency of the way its constituent operations are organized. Any change action includes two key-factors to ensure success: it must facilitate the learning process and smoothly progressively reduce any resistance to change of actors which is, besides, spontaneous and legitimate. ISEOR intervention-researches made it possible to establish that the efficiency and efficacy of the socio-economic intervention depended on the degree of compliance with the chronobiological rhythms induced by the order which is followed when carrying out the various technical operations linked with the intervention, by the intervals between meetings during this process, by the alternation between team-work (steering groups, "assessment/training" groups, focus-groups) and individual work (customized assistance to the handling of SEAM tools, diagnostic interviews) as well as by the time allowed for the sessions (one to two-and-a-half hours) in order not to hinder the usual activity of the actors in their day-to-day responsibilities by the exceptional extra work stemming from the change action.

The socio-economic intervention is adapted to the specific biological rhythms of every enterprise. These rhythms must be adequate enough to ensure the action progress while being compatible with the pulsation of the

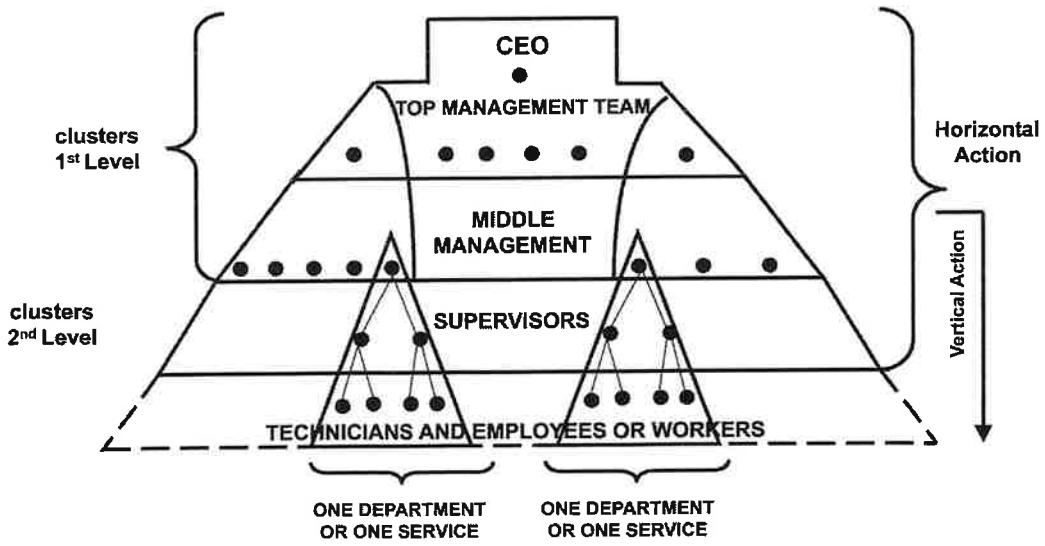

Figure 5.
The HORIVERT model

enterprise and its activity rate. The implementation of SEAM method over a year is schematically organized as shown in Figure 6.

Model foundation and construction

Necessity to go beyond traditional approaches

We began by developing our socio-economic theory of organizations (1972-1973) during a period known for having experienced many conflicts, social disputes (strikes) and economic clashes (oil crisis), not just in France, but also abroad. This deep seated evolution of the traditional demands, led to the adoption of new national and international social legislation as well as to new geopolitical and economic rules.

It is in this context of major upheavals and econommic crisis that it appeared necessary to us to revisit the most widespread organizational models, in order to identify the inadequacies and to underscore the lack of alignment with the problems encountered in today's real work world. The traditional models do not sufficiently integrate the conflicts *per se* and their after-effects within organizations.

Criticism of Taylor's organization theory (cf Savall, 1989, p. 16 sqq.). Initially (1973, 1975), we focused our criticism on the so-called "scientific organization" or Taylor's organisation theory starting from a macro-economic vision. The division of labor pushed to the limits leads to considerable economic and social waste. The potential profits that an excessively fragmented division of labor could generate are swept away by the costs of the dysfunctions it generates. Now these costs which we call hidden are not taken into consideration in accounting documents nor in the strategic decisions of organizations.

Thus the dichotomy between those who create and those who execute whether it be at the top of the company (strategic implementation decision) or at the level of the workshops (partitioning between methods services and manufacturing services) is a permanent source of high hidden costs, as is the rejection of initiative and non-wage incentives.

The social harmony resources of this Taylorian system are far from being obvious. Taylor confuses the concepts of exchange equality and the degree of

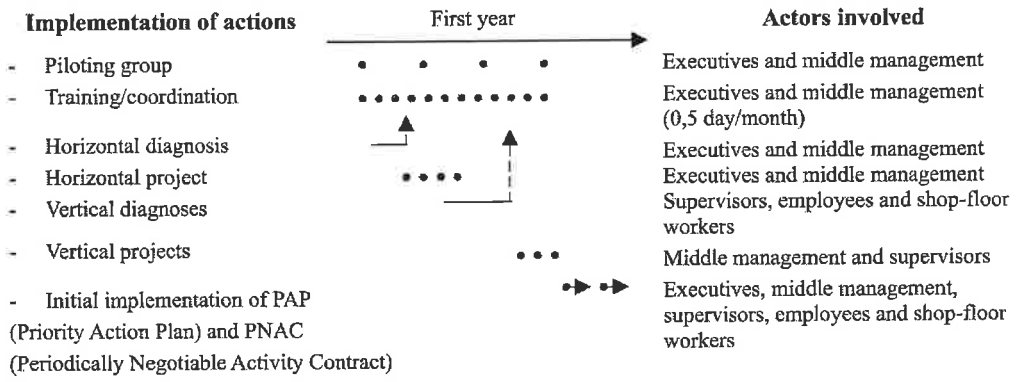

Figure 6.
A carefully-designed development of the action pace: the chronobiology of the process

freedom of the different actors in economic life and tends to side with the Marxist criticisms aimed at the inappropriate appropriation of the surplus of capital.

In terms of the organization of work, Taylorism leads to the dehumanization of work and to technological hegemony, despite the good intentions re-asserted by Taylor in front of the House of Representatives where he had been summoned to justify himself.

The "behaviorist" and socio-psychological approach. The school of human relations or of "behaviorism" contains, for the most part, innovative ideas in terms of management, in reaction against the traditional school excesses, in terms of decentralization and hierarchical responsibilities. However, the human aspect also highlighted, tends to be a bit too exclusive when compared with some positive contributions of Taylorism.

Although the contribution of the psychologists and the sociologists is not negligible, the socio-psychological viewpoint appears to be much too limited, because it totally excludes the economic factors from the modelling of Man's behavior on the work place.

The socio-technical approach (cf Savall, 1989, p. 59 sqq.) This approach is derived from the preceding one, but with a better integration of the technical element in the analysis of the behavior of man at work. It initially appeared to be more satisfactory because it was better adapted to the recent evolutions in industry and was much more operational, so much so, that we had envisioned developing the concept of a socio-economic-technical system. From 1973 to 1977, our intervention-researches helped demonstrate the effectiveness and the efficiency of the new organization models suggested by the socio-technical approach by developing financial tools to measure economic performance compared to the new models of organizational development, in relation to scientific management. But our reflection and the results of our research led us to go much beyond the socio-technical theory. At this point, we quickly established the need to dissociate ourselves from a viewpoint that was too technical, and where the economic aspect was totally missing or would only play a minor role since it would at best be considered as a merely exogenous variable both restrictive and "negative".

In the socio-economic theory that we propose, the economic dimension is not perceived solely as a constraint in the negative sense, but as a powerful and positive level. The economic motivation in its broadest sense (immediate results in the short run, value creation in the medium and long term) is an essential element in the human and social dynamics in the organization and its environment. Admittedly, the socio-technical approach attaches importance to the physical, technological and organizational structures, but it does not take into account the demographic and mental structures, like in our more complete socio-economic model.

The socio-technical approach is based on the implicit assumption that structures determine behaviors, whereas our theory highlights the many

possibilities of feedback of behaviors on structures through a strongly interactive approach.

The experiments we have conducted between 1973 and 1977 showed us that new models of organizing work proposed in the socio-technical approach, were not necessarily more effective than traditional organizations, because it is the dynamic of the progressive evolution of the organizations which involves economic and social performance variations, and not the static structure of this or that type of organization. The key success factor is thus not the organization: it is the quality of the steering of the activities and of the actors of the company, i.e. the quality of its management, which constitutes the root of the performance.

Criticism of organizational development. The organization development methods which we have studied or which we find within firms are not concentrated on the organization as a whole, but on all the participative levels, from the board of directors to the shop floor. From this perspective the development of the organization is only partial and fragile. Therefore we have created and developed our method of simultaneous horizontal and vertical interventions (HORIVERT), which make it possible to irrigate the entire company and effectively implement an overall organizational development integrating the economic and strategic aspects of organizational steering.

Model construction based on an incremental approach of successive experiments (1973-2002)

The opposition, universities/practitioners is not appropriate any more, as we enter the third millennium. The development of scientific knowledge is shared between academics and businesses experts. The contribution of practitioners concerning not only the dissemination and application of knowledge but also of its production is essential. Management sciences suffer from an absence of scientific observation. Our method of intervention-research aims to improve the quality of information to be processed. This type of consultancy constitutes a scientific observation technique. This legitimizes the presence of the intervener-researcher within the organization, because prejudgments are therefore eliminated which could inhibit the observation of the researcher or distort the data gathered by the researcher. Any development in scientific management research methods requires, in our opinion, tools and action plans which enable the researcher to obtain a quick overview of the situation that he proposes to describe, to explain and to model.

The term research-experimentation that we sometimes also use, clearly points out to the existence of explicit assumptions (though provisional) at the start of the field research, as well as the desire of the researcher to transform the object observed, in order to better understand it, while testing on and with the object the knowledge acquired during the intervention-research. This term also indicates our desire to express knowledge, structured as flexible rules. It is in this sense that our research method is connected to the applied sciences, with in

the field of physics, world-known researchers such as Charpak or de Gennes (Nobel Prize French physicist), being in very different fields from social sciences, close to our methodological practices. The characteristic of the experiments in the management disciplines leads us to refute the validity and the interest of the experiments carried out exclusively in "laboratory", "*in vitro*", because they do not try to reproduce or to analyze life-size concrete situations but "seek to act in a controlled way based on some *per se* variables", through assumption (Avenier, 1997).

Our researchers and the company actors co-create contextual know-how, through the observation of the way organizations actually function. As a result, the ISEOR could capitalize on an inheritance of structured knowledge which can be transmitted or transferred. It is the core of our model. In the field of management change and organizational development, research related to our interventions facilitates an in-depth observation of the situations analyzed. The creation and the clarification of observation methods concerning the conducted actions and the roles played within the organization, constitute a fundamental point for the quality of the researches of our team. We realized, for example, that the existing accounting methods are incapable of measuring and comparing the economic performance of the various models of work organization tested within the companies. Our objective at ISEOR is twofold: we want at the same time to help companies improve their socio-economic performance and to build new concepts, tools and methods which constitute as a whole the socio-economic theory of organizations.

The socio-economic approach to management has been implemented in many industrial or service companies and branches of industry (electronic, metallurgy, chemistry, domestic equipment, agro business, banks, telecommunications, consumer goods, hospitals, and public services, etc.). It led to the creation of a data bank, gathering the results of more than a thousand intervention-researches, constantly updated by the contribution of our team and the research they keep conducting every year in new activity sectors.

To check the "universal" applicability of our method, we conducted experiments in 30 countries on four continents, from Angola to Venezuela including Brazil, Canada, the USA, Mexico, Portugal, Romania, Tunisia as well as China (see the paper by Savall in this issue, "International dissemination of the socio-economic method", pp. 107-15).

Contributions and advantages of the model

The model's contributions are twofold: practical and theoretical.

Contribution to the management practices of organizations

With its "bio systemic" base, the socio-economic theory of organizations creates a model that integrates the various disciplines of analysis within the organizations. As an example:

- it integrates human resources and financial management by calculating the costs of the dysfunctions related to a lack of quality management;
- it integrates marketing, sales and strategy through the use of strategic vigilance indicators at every departmental level within the company (external environment internalization principle); and
- it integrates the operations and production management with organizational development, in a participative way, by involving the actors in the defining of solutions for staff reductions and process improvements within the company (technological appropriation principle).

The analysis of the interactions between various management dimensions of the business exceeds the usual methodology of the "business plan", which does not actually integrate the company's social system, nor the fundamental concept of human potential which constitutes the essential motive force behind the operation and development of the organization thanks to the alternation of conflictual and cooperative behaviors of individual or collective actors (teams).

Figure 3 demonstrates this concept of integration in the shape of a star whose points (specialized management domains) signify the forces pulling the organization, while socio-economic management helps integrating the contributions of the different management domains into decision systems.

Contribution to organization theory

This socio-economic model provides a consistent and comprehensive architectural model which constitutes an overall frame of references allowing to integrate or locate the different organizational theories. In particular one can note:

- the taking into account of some sociological and socio-technical theories of organizations, related to an analysis of the economic performance in both the short and the long term;
- the comprehensiveness of the change management methodology is organized in a logical way, which creates a higher level of awareness and implication for all of the players in the socio-economic intervention;
- the integration of the management of managerial knowledge or know-how, by organizing the creation and the dissemination of information related to management practices within organizations; and
- the contribution to post-modern management approaches, through the process of deconstruction and reconstruction of managerial discourses within the framework of the socio-economic intervention.

The socio-economic theory of organizations is threefold: it includes an innovative method for the permanent management of organizations, a method for controlling change within organizations and a method of dissemination throughout wider areas composed of extremely different actors and organizations (see Savall, 2003).

References

Avenier, M.-J. (1997), *La Stratégie "Chemin Faisant"*, Economica, Paris.

Savall, H. (1989), *Enrichir le Travail Humain*, 3rd ed., Economica, Paris.

Savall, H. (2003), "International dissemination of the socio-economic method", *Journal of Organizational Change Management*, Vol. 16 No. 1, pp. 107-15.

Further reading

Desmaison, G. (1998), "Le pilotage du changement" ("Steering change"), in ISEOR (Ed.), *PME-PMI: Le Métier de Dirigeant et Son Rôle d'Agent de Changement (Small-and-medium-size Firms: The Job of CEOs and Their Role as Agents of Change)*, Economica, Paris.

ISEOR (1982), "Gestion socio-économique innovatrice: stratégie des entreprises et évolution des emplois" ("Innovative socio-economic management: company strategies and job evolution"), *Proceedings of ISEOR Colloquium*, Lyon-Ecully.

ISEOR (1985), "Méthodologies fondamentales en gestion. L'implicite et le normatif dans les modèles", *Proceedings of ISEOR Colloquium*, Lyon-Ecully.

ISEOR (1986), "Qualité des informations scientifiques en gestion" ("Quality of scientific information in management"), *Proceedings of ISEOR Colloquium*, Lyon-Ecully.

ISEOR and HEC School of Management (2001), *Knowledge and Value Development in Management Consulting*, ISEOR Publishing, International Conference MCD, Academy of Management, Lyon, March.

Péron, M. (Ed.) (2002), *Transdisciplinarité: Fondement de la Pensée Managériale Anglo-Saxonne? (Is Transdisciplinarity the Cornerstone of Anglo-Saxon Managerial Thinking?)*, Economica, Paris.

Péron, M. (2002), "Réflexion sur la transdisciplinarité dans la pensée managériale" ("A few considerations on transdisciplinarity"), in Péron, M. *et al.* (Eds), *Transdisciplinarité: Fondement de la Pensée Managériale Anglo-Saxonne? (Is Transdisciplinarity the Cornerstone of Anglo-Saxon Managerial Thinking?)*, Economica, Paris.

Savall, H. (1975), *Enrichir le Travail Humain: L'evaluation Economique*, Preface de Jacques Delors, Bordas, Paris (Spanish translation: *Por un Trabajo Mas Humano*, Tecniban, Madrid, 1977; English edition: *Work and People: An Economic Evaluation of Job-enrichment*, foreword by Ansoff, H.I., Oxford University Press, New York, NY, 1980; first published as a PhD dissertation, University of Paris, Dauphine, 1974).

Savall, H. (1977), "Formation et conditions de vie au travail" ("Training and QWL conditions"), in *Revue Française de Gestion*, March/April, reprinted in *Revue Personnel*, Paris.

Savall, H. (1978), "A la recherche des coûts et performances cachés de l'entreprise pour un diagnostic socio-économique de l'entreprise" ("Looking for hidden costs and performances: toward a socio-economic diagnosis of firms"), *Revue Française de Gestion* No. 18, Paris.

Savall, H. (1978), "Propos d'étape sur la régulation socio-économique de l'entreprise par la recherche de la compatibilité de l'efficience économique et du développement humain" ("An initial statement on the socio-economic regulation of companies through the search for the compatibility of economic efficiency and human development"), *Revue Economie Appliquée*, No. 4, Paris.

Savall, H. (1979), "La dimension psychologique de l'analyse socio-économique des conditions de vie au travail" ("Psychological dimension in the socio-economic analysis of QWL conditions"), *Bulletin de Psychologie* No. 344, Paris.

Savall, H. (1979) *Reconstruire L'entreprise: Analyse Socio-économique des Conditions de Travail (Reconstructing the Enterprise: A Socio-economic Analysis of Work Conditions)*, Preface François Perroux Dunod, Paris.

Savall, H. (1979), "Stratégie socio-économique des entreprises" ("Socio-economic strategy of firms"), *La Documentation Française*, Rapport de la Commission Industrie, Commissariat Général du Plan, Paris.

Savall, H. (1985), "Le développement socio-économique de l'entreprise et ses enjeux" ("The socio-economic development of companies: what is at stake"), *Revue Française de Gestion* No. 52, Paris.

Savall, H. (1986), "Les sciences de gestion en France: tendances actuelles" ("Management sciences in France: current trends"), *Le Courrier du CNRS*, No. 64, Paris.

Savall, H. and Bonnet, M. (1988), "Coûts sociaux, compétitivité et stratégie socio-économique" ("Social costs, competitiveness and socio-economic strategy"), *Encyclopédie de la Gestion*, Vuibert, Paris.

Savall, H., Bonnet, M. and Moore, R. (2002), "A la recherche d'une approche intégrée du management" ("In search of an integrated approach to management"), in Péron, M. *et al.* (Eds), *Transdisciplinarité: Fondement de la Pensée Managériale Anglo-Saxonne? (Is Transdisciplinarity the Cornerstone of Anglo-Saxon Managerial Thinking?)*, Economica, Paris.

Savall, H. and Zardet, V. (1985), "Où va la recherche en science de gestion?" ("What is management research coming to?"), *Revue Française de Gestion*, No. 53/54, Paris.

Savall, H. and Zardet, V. (1985), "Rapport de synthèse sur l'état de la recherche en gestion en France" ("Management research in France: a synthesis"), *Revue Française de Gestion*, No. 53/54, Paris.

Savall, H. and Zardet, V. (1987) *Maîtriser les Coûts et les Performances Cachés: Le Contrat d'Activité Périodiquement négociable* (*How to Control Hidden Costs and Performances: The Periodically Negotiable Activity Contract*), Economica, Paris.

Savall, H. and Zardet, V. (1992), *Le Nouveau Contrôle de Gestion: Méthode des Coûts-Performances Cachés* (*A New Trend in Management Control: Hidden Costs/Performances Methodology*), Editions Comptables Malesherbes-Eyrolles, Paris.

Savall, H. and Zardet, V. (1995), "La dimension cognitive de la recherche-intervention: la production de connaissances par l'interactivité cognitive" ("The cognitive dimension of intervention-researches: knowledge production through cognitive interactivity"), *Revue Internationale de Systémique*, Paris.

Savall, H. and Zardet, V. (1995) *L'ingénierie Stratégique du Roseau* (*Strategic Engineering of Reed*), Economica, Paris.

Savall, H. and Zardet, V. (1997), "Vers la pensée en action stratégique et le non-dit dans le discours sur la stratégie" ("Toward strategic action thinking and the unsaid in discourses on strategy"), *Revue Management International*, Montreal.

Savall, H., Zardet, V. and Bonnet, M. (2000), *Libérer les Performances Cachées des Entreprises par un Management Socio-économique* (*Releasing the Untapped Potential of Enterprises Through Socio-economic Management*), International Labour Organization, Geneva.

Talaszka, H. (2002), "Recherche de transversalité en entreprise. Cas pratiques: Belin, Lenôtre, Ferrero" ("Looking for transversality within firms"), in Péron, M. *et al.* (Eds), *Transdisciplinarité: Fondement de la Pensée Managériale Anglo-Saxonne? (Is Transdisciplinarity the Cornerstone of Anglo-Saxon Managerial Thinking?)*, Economica, Paris.