

Strategic Bedrock Theory and the Cohesion Leverage Effect

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Abstract

The model of strategy proposed by the socio-economic theory of organizations favors the role of human potential. Cohesion is a predisposition of individuals and groups to synchronize and cooperate. Cohesion appears as one of the major factors of success of endogenous and pro-active strategies. This internal cohesion – bedrock of the organization – enhances sustainable strategic organizational performance. We will analyze through this qualimetric research, based on 35 cases of companies and organizations, that the organizational leverage - or multiplier-effect constitutes an Intangible Investments on Qualitative Development of Human Potential (IIQDHP) through the cohesion degree and sustainable socio-economic performance.

Key-words: cohesion, socio-economic theory, strategic bedrock, leverage effect, Intangible Investments on Qualitative Development of Human Potential (IIQDHP)

A resource-based strategy (Penrose, 1959; Wernerfelt, 1984) is characterized by the importance granted to the enhancement of strategic choices of the different resources owned by the company in its strategic resources, not only the financial ones. Among the resource-based strategies, the model of pro-active strategy proposed by the socio-economic theory (Ansoff, 1981; Boje & Rosile; 2003, Buono, 2007; Cappelletti, 2012; Gervais, 1979; Perroux, 1975; 1979; Plane, 2012; Savall, 1974b, 1979; Savall & Zardet, 1987, 1995, 1996, 2014; Tabatoni & Jarniou, 1975) favors the role of human potential. The activation of human potential constitutes an essential lever for stimulating the sustainable development of the companies. Indeed, any individual may be considered as a strategist within the company, as he/she has a more or less conscious personal project and contributes, more or less actively, to the achievement of the company's strategic actions.

Our longitudinal researches, based on *in vivo* experimentation, showed that the internal and external flexibility of the company, based on its ability to reshape its structures and adjust its behaviors with a mid-term vision, as well as its *pro-activity* degree, according to its human resources' energy and its *integral innovation* capacity, constitute key factors of competitiveness and sustainable development and growth. Taking into account *the hidden costs and performance* improves the relevance of strategic decisions thanks to the information provided to anticipate dysfunctions, because of their recurrence. These reduce the *strategic strength* of the company, due to the loss of resources that the chronic shortfalls in overall performance generate

We can measure the overall economic performance's variation of the company (Savall & Zardet, 1998, 2008) through a synthetic indicator: *the hourly contribution to value-added on*

variable costs (HCVAVC). This ratio results from a simple analysis of the costs structure: revenue (incomes) - variable costs = overall value-added, divided by the total number of all the actor's working hours, directors, managers, and employees. When the indicator value increases, the overall economic performance of the company improves, as well as its strategic situation, thriving or struggling, and *vice versa*.

Recycling hidden cost in self-financing of intangible investments on qualitative development of human potential (IIQDHP) is an effective lever to define and steer sustainable overall strategies of the company. Hidden costs constitute a stock that can be partially converted into investment on integral innovation, related to the five strategic resources areas: products, markets, technologies, organization, and human potential.

However, these five variables of strategic decision must be prioritized, given that human potential is essential in the value-added creation process. Human potential *creativity* is irreplaceable, and creates innovations that constitute the organizational dynamic and of the economic and social system. A sustainable development of companies and employment requires a strategy that gives priority to the self-financed investment on qualitative development of human potential (IIQDHP), including the evolution of competences and behaviors, then the creation of new jobs (Savall & Zardet, 2008). Indeed, confronted to the natural erosion of team cohesion, as well as the changes of professional competences, the company must regularly dedicate part of its resources, to maintain their involvement and professionalism levels. The experimentation of the meta-model of the pro-active and endogenous socio-economic strategy in several hundred companies allowed us to identify some generic principles. Recycling hidden costs into value-added creation enabled to self-finance strategic actions to increase the sustainable performance, mainly consisting in:

- Production and sales of additional volumes, at potentially lower prices; due to the sustainable decrease in production cost;
- Improvement of products, goods and services' quality;
- Increase in creation of potential: share of the strategic reflection within the companies, training, and increase in technological and competitive vigilance, creation and launch of new products, new technologies and/or new competences;
- Organizational keep or up-sizing, loyalty development and staff employability.
- Compensation increase for the different stakeholders: private or public shareholders, executive team and other employees, managers and no-managers, fiscal and social institutions.

First, we develop cohesion as a key factor for sustainable socio-economic performance. Then, we show tracks of non-cohesion, through a qualimetric analysis of the lack of cohesion in 35 cases of different companies and organizations. Then, we study the impacts of deliberate strategies to improve cohesion in 13 cases of assessment, measuring the variation of cohesion degree in different industries, and illustrating the relation between cohesion and management, strategic, and operational decision. We conclude on the validity requirements of these results.

Cohesion, Key-Factor of Sustainable Socio-Economic Performance

Cohesion seems to be one of the key success factors of the self-financed and endogenous pro-active strategies.

Definition and positioning of cohesion

Scientific observation carried out over more than one thousand intervention-research programs in a wide variety of organizations showed that the hierarchical power, dear to the Traditional School of Management (Taylor, Fayol, Weber), is poorly operating in many professional situations, because of the actor's disobedience capacity and the inefficiency or non-existence of sanctions.

Cohesion is a predisposition of individuals and groups to cooperate. Cooperation fits into a concatenation of behaviors and actions: communication – negotiation – cooperation – coordination – consultation. **Communication** designates the exchanges of information flows between one or several transmitting actors and one or several receiving actors. The intervention-research programs realized by the ISEOR researchers showed that communication is a key condition, but insufficient, to allow an effective and efficient cooperation. One condition and one step of negotiation are necessary to go from simple communication to a real productive cooperation. Negotiation involves the creation of a common ground between partners to make action possible.

These conditions of effectiveness and efficiency in the functioning of the organizations are necessary to all interfaces between individuals and between the organization's teams, vertically (through the hierarchical way), horizontally (between the departments at the same organization chart) and transverse (in an oblique crossing between the different levels - vertical and horizontal). Cooperation allows *coordination* of actions and activities carried out by the company, that is to say, a scheduling which enables the realization of a good or a service, with a resource donation and this, with a deadline promised to a partner or a customer. Cooperation allows *consultation* too which generally involved a behavior change and an effort from the partners in the action.

Cohesion is a very important *capacity* of an organization. It consists in the actors' propensity to cooperate, with no needs of the intervention of a hierarchic or a third. The cooperation is essential to a well conducted activity of the company and to the engagements to its stakeholders. Cohesion favors the comprehension of messages transmitted through the information systems, intensifies (increases the impact level) and accelerates (increases the speed) the stimulation function of professional behaviors. In this way, the cohesion is an efficiency factor, because it allows cost-transactions savings and prevents the hidden-costs of many dysfunctions, caused by non-cohesion. It could be measured by the *qualimetrics* methodology (Savall, 1974a, 1979; Savall & Zardet, 1996, 2011, 2014), through *the content analysis* of the

ideas expressed by the actors during the socio-economic diagnostics and in assessments of change actions, supplemented by the analysis of *quantified indicators*.

Connections between traditional organization, steering intensity and cohesion

The socio-economic theory of hidden cost-and performance (Savall & Zardet, 2011, 2013a, 2014) is based on a critical analysis of the traditional accountancy model which doesn't allow one to explain the organizational performance level (Savall, 1974a, 1979, 2010; Savall & Zardet, 1987, 2008). It proposes decision-support tools which are more relevant and which integrate the hidden-costs' dysfunctions consideration. The application levels of the socio-economic theory are multiple: the organization or company (those two words will be used equally) and the territory, understood as a group of organizations, institutions and companies, tangled and interacting.

The *Intangible Production System (IPS)* of the organization has an effect on the individual and collective commitment of the actors at work. It influences conflict-cooperation behaviors of individuals and teams (De Backer, 1972), source of dysfunctions resulting from interactions with the organization structures. Dysfunctions generate hidden-costs, meaning value-added destruction, which affects negatively the financial performance of the organization, namely the balance budget of non-profit making organizations or the companies' profit level. The IPS contains two performance factors, *the infection degree of the "Taylorism, Fayolism, Weberism virus (TFW)" and the activities' steering intensity*.

The TFW virus metaphor (Savall & Zardet, 2005, 2013) refers to the anachronistic survival of the principles of the Traditional School of Management, proposed by Taylor (1911, 1982), Fayol (1916) and Weber (1924) which, besides, contributed their time to the economic and social progress. However, it is unfortunate that one century later, the theorists, experts and practitioners continue to propagate three principles which became obsolete: the *maximal division* labor, *dichotomy* between conception, decision and realization of the activities (Savall, 1974b, 1975, 1979), as well as the *depersonalization* of workstation, organization charts, process, methods and rules (Friedmann, 1956; Trist & al., 1963; Lussato, 1972; de Montmollin, 1974, 1981; Reynaud & Rémy, 1974). Those factors no longer contribute to sustainable overall performance, considering the evolutions of behaviors and skills, of the social environment and of the national and international politic environment (Savall, 1974a, 1981, 2010). The "mixed" theory of these three authors has aroused a massive literature on labor analysis, recruitment and theory of the organizations (ANACT, 1979; Gibson, 1973; Herrick, 1975; Reif & al., 1972).

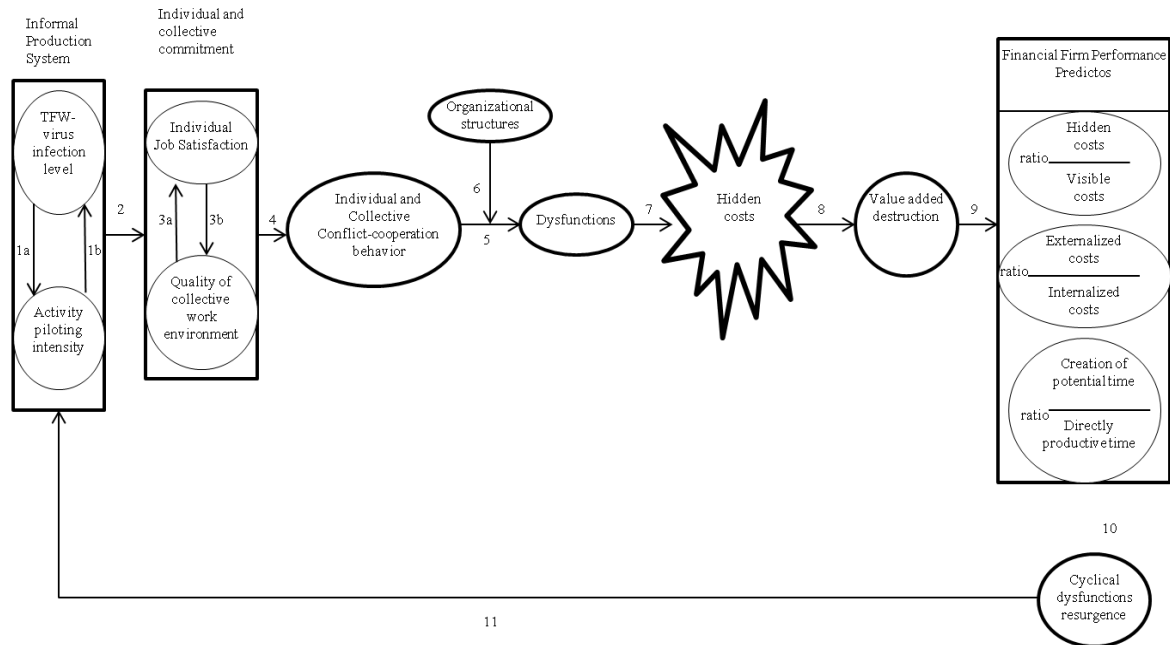


Figure 1. Modeling of the socio-economic theory of hidden-costs

A virus is defined as a small infection agent, constituted by a group of sub-microscopic entities, which reproduce themselves inside animals, humans or vegetal cells. Most viruses are pathogenic. The infection degree by TFW virus of organizational models and managerial practices dominant refers to the degree more or less important of *ineffective cooperation* between the activity participants, individuals and teams, establishments of a same organization, branches of an *industrial* group or a services company. A wise critic would not be intended to Taylor, Fayol or Weber themselves, but to their successors, theorists, experts and practitioners, as careless applicators of outdated theories, in an economic and social environment which has undergone many and deep mutations. Indeed, the human, social and geopolitical context, as well as the education's level of working population, has considerably changed in one century.

The criticism of the traditional work organization, represented by the *taylorism-fayolism-weberism* virus metaphor, rests primarily on the fact that the unity is centralized on the organization of function or individual work station and that the standard times used to measure the time it takes to realize tasks do not take into account the work conditions which interfere with productivity. Thus, the cooperation procedures between individuals and teams are not structured, even systematically neglected; times needed for communication, negotiation, cooperation, coordination, consultation, and the constant integrated training, are minimized, even ignored in the projected organization activity of the company (Bouvet & al., 2012 ; Coyle-Shapiro & Kessler, 200; Delobbe & al., 2005; Louche, 2001; Merck et al., 2009; Neveu & Thévenet, 2002; Peretti, 2012).

The *activity steering intensity* variable of the organization constitutes a success key-factor of the organization performance *improvement*. It is composed of three levers: the *stimulating information system* of actors, *activities synchronization* and the *grooming* of the intangible production system.

The pro-active strategies steering is more effective and efficient when the organization uses decentralized vigilance indicators, focusing on both its economic and social performance. Such a steering requires, indeed, to systematically include the three time-related horizons, short, medium and long term, that is to say, that pertains to:

- Security of the immediate management: cash-flow, quarterly and annually results,
- Multiannual development: futures results of current actions and investments,
- Prospective: future of the business and products portfolio, of markets and technologies, organization and human potential, notably the recurrent need of new individual and collective skills.

The *information* component may have an individual and collective *stimulation* impact, inciting them to engage a decisive action, which involves human energy expenditure, a specific behavior and competence contribution. Nevertheless, an organization secretes also an important volume of *non-stimulating* information, which causes hidden costs, source of the economic performance deterioration.

The *activities and actors synchronization* component, second lever of the activity steering intensity, refers to the coordination practices' development in real time of actors, during the activity process. Synchronization deficiency has two effects. The first one is a lack of creativity or implementation of innovations or operational improvements. These involve, in fact, resources negotiations, transversal arbitration and coordination between departments of the organization, as well as prevents actions which allow reduction of dysfunctions and hidden costs. The second effect results from propensity of priorities to malfunction, because of the behaviors instability within organizations, subjected to an unprecedented pressure from their private and public competitive environment.

The third component is the *regular grooming* of dysfunctions. The organization is a living being who deals with a *natural pollution* throughout its lifetime, considering that structures, process and behaviors are subjected to an inescapable evolution and deterioration overtime, taking into account the entropy organizational phenomenon. That is why a periodic reassessment of dysfunctions is necessary, considering their reoccurrence. In this way, the *intangible production system* loses a part of its efficiency and effectiveness when it is not regularly groomed.

Statement of the strategic bedrock theory

The proposed theory (Savall & Zardet, 2005) consists of three “theorems”:

1) The success of the organization's external strategy is a function of the intensity of its internal strategy

2) The organization's external performance level is a function of the intensity degree of its internal cohesion (see annex A).

3) The variation of the cohesion degree has a multiplier effect (or leverage effect) on the performance level's variation; thus, a doubling of the cohesion level creates a performance increase more than doubled.

These three principles were formulated from several hundred cases of deliberated change assessments in companies (collected in the ISEOR data base). This paper deepens the strategic bedrock theory by clarifying four hypotheses whose validation will rest on 35 cases of organizations and companies.

Hypothesis 1: the infection's level of the TFW virus degrades the cohesion degree of teams and the organization (Coh) and tends to reduce the *activities steering intensity* level (Sti).

$$Coh = f(virus)$$

Hypothesis 2: the teams' and organization's cohesion is a key-factor of the steering intensity and the decision making.

$$Sti = f(coh)$$

Hypothesis 3: the level of the activities steering intensity has an influence on the teams' and organization's cohesion degree and tends to reduce the virus infection level.

Hypothesis 4: the teams' and organization's cohesion level affects their sustainable socio-economic performance level (Ssep).

$$Ssep = f(Sti * virus)$$

Validation of this hypothesis will be attempted with the qualimetrics analysis of results from 13 cases which have benefited to a deepened assessment, among the 35 diagnosed cases.

Positioning in relation to the socio-economic strategy. The socio-economic strategy (Savall, 1974a; Savall & Zardet, 1995, 1995) relates to a continuum between the internal and external perimeters of the organization, considering that its borders with its economic, sociological and ecological environment are porous. This internal-external dialectic relation determines the competitiveness of the organization.

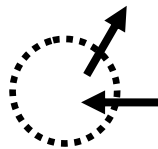


Figure 2. The porous organizational boundary.

Competitiveness refers to the capacity of a company or organization, to survive or expand at short, medium and long terms. It involves a reasonable economic performance level, resulting from various interactions with and between its principal external or internal stakeholders:

- customers, suppliers, normative institutions, professional and trade-union organizations, competitors;
- governance structure, shareholders or supervision organisms, salaried or volunteer personnel;

Competitiveness rules the relations in the different spheres, privates, publics or associative. The competitiveness is source of sustainable value creation which allows paying all the stakeholders, in dividing the created resources (see also the excesses theory in economics).

- from the adaptation notion to the *integral innovation* concept

Adaptation to the environment may be regressive or progressive. The first one leads to a shrinking of the company when it “passively” adapts to the pressures of its environment, exerted by its stakeholders.

The integral innovation is socio-economic and relates on all the strategy components (or variables): products, market, technologies, human potential, as well as their combination: the company’s organization. Innovation requires internal *creativity*. It consists to cause a deliberate action of change, affecting products, goods or services, quality of service and relationship to the customer or user, to the conquest of solvent markets or new users segments, to the technologies integration in learning new expertise, to the constantly renewed stimulation of involvement, commitment and to constant evolutions of skills, to periodic readjustment and restructuring of teams and processes.

Integral innovation constitutes a *progressive* and *pro-active* adaptation of the organization to the evolutions of its relevant environment.

- Sustainable *economic performance* depends on, and expresses, the competitiveness level. It is composed by *immediate results*, creation of available resources at medium term, and *creation of potential*, constituted by the value of time invested by human potential, at short term, in order to produce results, at later stage, at medium and long term.

- *Intangible Investment on Qualitative Development of Human potential (IIQDHP)* refers to the metamorphosis actions of the three human potential components: human *energy*, involvement and commitment *behaviors* within the company or organization activities, and the evolving *competences* of the actors. The IIQDHP is self-financed thanks to the recycling of hidden costs to value-added creation, through integral innovation practices, which are evaluated

every semester. The realization time of the intangible investment IIQDHP allows providing for a *learning* process, spreading on several years, which produces a *multiplier effect* on performance, resulting in a very high return on investment.

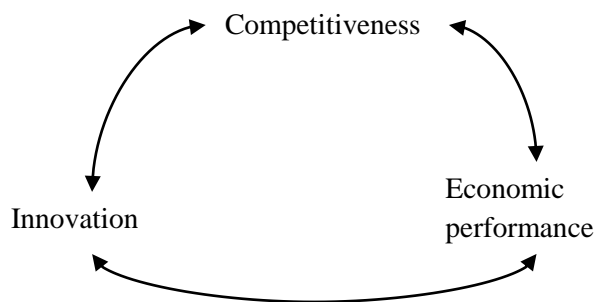


Figure 3. Diagram of the socio-economic system of sustainable-survival-development of the company or organization

Remember that cohesion is the synchronization capacity of the productive behaviors of the actors. The nature of the increasing action of cohesion level is an action of change, principally endogenous. It requires an exogenous stimulation, which causes an awareness of the external threat.

Sequencing of the metamorphosis action developing cohesion. Six stages structure the process of change (Savall, 2003; Savall & Zardet 1987, 1995, 2008; Savall, Zardet & Bonnet, 2008):

- 1) awareness of a sustainable external threat, requiring a pro-active strategy in order to maintain or increase the competitiveness level of the company or organization
- 2) decision of a pro-active strategy in integral innovation favoring the competitiveness
- 3) awareness of a lack of internal cohesion making difficult or impossible the decided pro-active strategy.
- 4) decision of an internal metamorphosis strategy positioned to human potential of the company or organization and based on the IIQDHP, in order to increase the cohesion degree necessary to the success of the external strategy
- 5) engagement of a metamorphosis action, according to the socio-economic intervention methodology (figure 3).

6) assessment of the economic performance variation obtained, by taking into account the intensity of the energy of change, measured by the annual, total and per-person amortization of the IIQDHP (see appendices B & C).

This metamorphosis process, developing simultaneously cohesion and sustainable economic performance, has been practiced and evaluated through more than a thousand cases of companies and organizations (Savall & Zardet, 2008b, 2014).

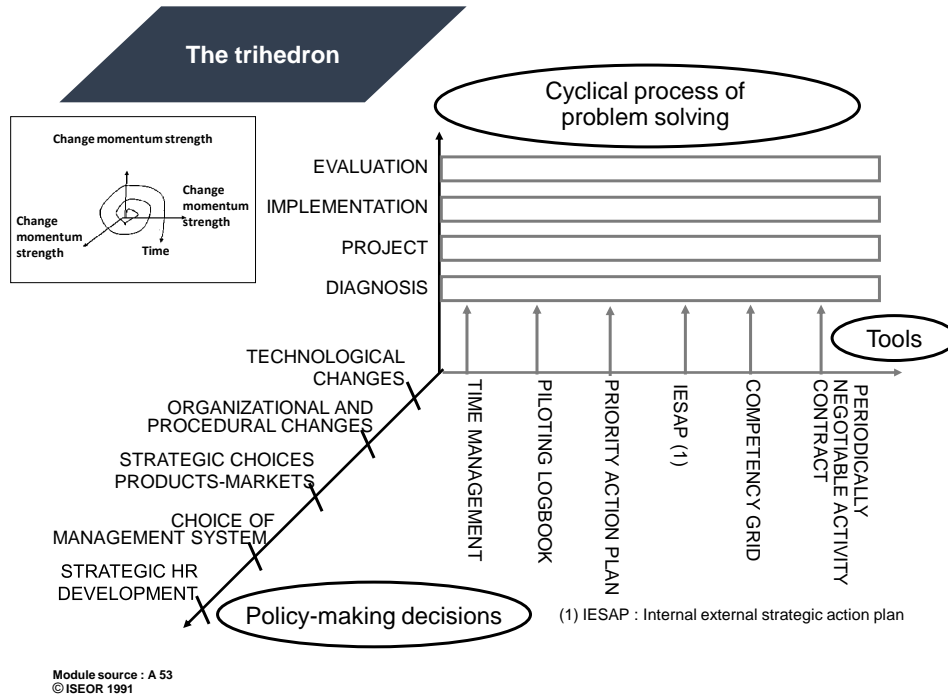


Figure 4, Trihedron of the metamorphosis dynamic

Marks of Non-Cohesion and TFW Virus in the Organizations Diagnostics

How actors within organizations express the problems they encounter? And what are the financials impacts of non-cohesion and of the TFW virus? The qualimetric analysis of the actors' words about their company dysfunctions, and then the hidden-costs calculation, effected with the support of the managers, allow us to successively answer to both questions.

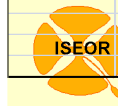
Expression of non-cohesion dysfunctions by the actors: directors, managers and basic personnel

Content analysis of the socio-economic diagnostics, realized within 35 companies from seven industries in five countries (France, Belgium, Switzerland, Lebanon and Mexico) makes

possible to synthesize the actors' words, questioned on the tangible dysfunctions within their organization, into 1003 generic key idea related to the TFW virus.

These ideas have been classified in 10 major themes, sensitive to the virus or non-cohesion: work atmosphere, cohesion, communication-coordination-consultation-cooperation, transversality, rivalry-conflict-competition, competences, human resources management, management styles, general organization and work organization.

DIAGNOSES		Key-Ideas
		% Key-ideas
1 - WORK ATMOSPHERE		10%
2 - COHESION		4%
3 - COMMUNICATION COORDINATION CONSULTATION COOPERATION		21%
	Meetings (devices)	2%
	Communication (device)	2%
	Meetings (effectiveness)	1%
	Internal cooperation	1%
	Upward communication	1%
	Information (transmission)	1%
4 - ACROSS APPROACH		9%
5 - RIVALRY CONFLICTS COMPETITION		3%
6 - COMPETENCES		11%
7 - HUMAN RESOURCE MANAGEMENT		4%
8 - MANAGEMENT STYLE		17%
	People management	3%
	Team management	2%
	Fairness / workload	2%
	Role of management (responsability)	1%
	Proximity management	1%
	Fairness / compensation	1%
9 - GENERAL ORGANIZATION		8%
10 - WORK ORGANIZATION		14%
	Poorly executed tasks	3%
	Procedures (adaptation)	2%
	Task distribution (precision)	1%
	Work methods (sharing)	1%
	Procedures (rigidity)	1%



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Figure 5. Qualimetrics analysis of actors' words pertaining to non-cohesion and the TFW virus

Content analysis of the actors' words, during the diagnostic interviews and before the action of change, shows a concentration of dysfunctions on 3 strongly mobilized themes, which represent 52% of the perceived problems in almost the totality of the 35 cases (94 to 100%). These 3 themes are about the communication-coordination-consultation-cooperation, the management style, and the work organization. If we add the competences and work atmosphere's sections, these 5 themes represent 75% of dysfunctions.

The themes gathering the 1,003 dysfunctions expressed in the diagnostics, might be illustrated through some verbatim from a medico-social organization:

- work atmosphere: “the work atmosphere is disrupted by divides, notably depending on years of experience that we have in the structure”

- communication-coordination-consultation-cooperation: “a lack of professional dialogue within the executive committee sustains a climate of misunderstandings”
- competences: “everyone’s competences are unknown”
- rivalry-conflict-competition: “many conflicts linked to inappropriate behaviors create an iniquity feeling”
- human resources management: “promotion does not integrate the employees qualifications”
- management style: “an authoritarian management coexists with some permissiveness or an absence of management”
- general organization: “directors and managers are too far from the ground floor”
- work organization: “there is a lack of rules and common methods, which causes communication difficulties and conflicts in the department”
- transversality: “between the headquarters and the establishments, we do not know each other”

Let us take, as a second illustration of the demonstrations and impacts of the TFW virus, the case of a hospital facility, where patients care requires contribution of many corps: doctors, nursing staff (nurses, nursing auxiliaries, and hospital service agents), administrative agents and managers (management accountant, human resources personnel, admissions and invoicing services), technical and paramedical (biology, radiology, medical imaging, psychology, physical therapy, pharmacy, cookery, laundry, maintenance and security). Some of these corps work in a close proximity, within the hospitalization or consultation departments; others are more distant. However, the geographical criterion is a variable with little significance to explain the inter-professional cooperation quality.

The lack of operational steering tools comes from the fact that tools and indicators used in care’s facilities are not genuine management tools enabling the pro-active steering of persons and activities. They often are barely operational and used *a posteriori* as data collection. There is neither veritable development nor regular use of management tools by the care services managers. It is the support services (human resources services, management control or financial control) which formulate and use steering tools for the whole organization. That is why these tools inform actors with information *a posteriori*, which does not enable events anticipation. Care services often associate these tools to “administration”, which, for a nurse, represents the less interesting activity of his/her profession. Besides, the mandatory character of some tools confers to them a restrictive dimension rather than assistance to the daily steering; and rather a control function than a steering function. For example, mandatory evaluation grids, of several pages, are updated every year by the managers, during the yearly individual interviews, even if it is used very rarely as a base for further individual interviews. *On the contrary*, the support services, administrative or technical, use and create many tools and indicators, mainly restricted

to quantitative and financial information. Here again, the *inter-professional divergence* is apparent. The use and apprehension of steering tools or steering indicators appear heterogeneous. The difference in representation that a care service and a support service have of a management tool, clearly illustrates the lack of common language and the gap separating them.

In the 35 diagnostics analyzed, the theme of communication-coordination-consultation-cooperation is the most ponderous in the whole in the seven sectors with which we worked: industry, lucrative services, regulated liberal professions, public utility, hospital and medico-social sector, other sanitary services. The second issue expressed is the one concerning management style, which, by the way, comes in the first rank for the medico-social industry. The third problematic theme is work organization. However, this is not often expressed in the regulated liberal professions. We notice in the latter, though constituted of very small organizations, that the four main problems are classified according to the following order: communication-coordination-consultation-cooperation (33%), work atmosphere, management style and competences (each of them 17%).

Economic impacts of non-cohesion: the hidden-costs related to the TFW virus. The diagnostics quantitative analysis shows that the average amount of hidden-costs, that is to say of real or potential value-added destruction, *per person and per year* is 24 000 €, and in a spread from 20 000 € (a SME of services) to 72 000 € (an industrial SME).

Dysfunctions cause *absenteeism*, *work accidents*, *occupational diseases*, *quality defects* and *direct productivity gaps*. These indicators of hidden-costs represent respectively 15%, 1%, 4%, 32% and 47% of the total amount of hidden-costs for the entire 35 cases.

The hidden-costs calculation takes into account six components: *excess salaries* (due to function shifts or indemnities without compensation of production), *over-consumption* (purchases of raw material, energy and supplies), *and overtime* (supplement of time compared to the suitable times), *non-production* (shortfall, opportunity costs), *non creation of potential*, as well as *risks* (Savall & Zardet, 1987, 2013b). In all cases, these components represent respectively 14%, 8%, 48%, 25%, 4% and 2% of the total amount of the hidden-costs identified.

The loss of value-added, particularly related to overtimes and non-production, represents between 75 and 92% of the total of hidden costs, in 29 companies on 35. These amounts correspond with paid-time and work without value-added creation, and in some ways, “useless” times and work.

Absenteeism has a high hidden-cost (between 19 and 68% of the total amount), especially in three sectors: public, sanitary and social.

The presentation of the diagnostic to the persons who have participated to the interviews, and then to the hidden-costs calculation, board members, managerial staff and employees, brings an awareness of the internal actors about the existence of a economic resources deposit which evaporate because of the many dysfunctions. Those are primarily due to (53%) the lack of cohesion and the organization conception based on the TWF virus.

Actions for the organizational change aimed at developing cohesion and diminishing the effects of the “virused” organization, experienced in 1310 companies and organizations, allow to simultaneously reduce the dissatisfactions caused by the losses of economic resources pertaining to dysfunctions.

Marks of the Cohesion Improvement in the Assessments of the Socio-Economic Process Of Metamorphosis

We analyzed the *assessment* of the metamorphosis process in 13 organizations, among the 35 diagnosed cases. The *qualimetric* assessment contains two parts:

- a *qualitative* analysis of evolutions expressed by a sample of persons from different hierarchic levels, directors, managers, middle managers, basic personnel.
- a *quantitative* and *financial* analysis performed from indicators followed by the company. The financial assessment contains the variation analysis of the hidden-costs and of the major indicators from the company’s accounting department.

Qualitative results. The actors’ words have been summarized in 296 ideas (figure 4) which reveal the cohesion improvement compared to the previous situation, during the diagnostic. The major mobilizing themes, gathering an idea of improvement, are:

- communication-coordination-consultation-cooperation (19% of the ideas expressed)
- work atmosphere (15%)
- a more interesting work organization (14%)
- involvement of the management style (12%)
- competences increase (12%)
- transversality practices (11%)

The comparison between the non-cohesion expression in the diagnostic and improvements in the assessments of the actions of change reveals a semantics asymmetry. The key-words and the key-ideas which express the problems of cohesion in the diagnostics are different from those that express the positive evolution of cohesion in the assessments; this shows a sociolinguistic asymmetry. The principal contrast of terminology is related to two themes, yet frequently mobilized in the assessment: the management style (-30% compare to the diagnostic) and the communication-coordination-consultation-cooperation (-10%).

Some themes, scarcely mentioned during the diagnostic (only 3 to 4%), disappear almost in totality during the assessment: human resources management, rivalry-conflict-competition (-70% of expressions).

The volume of the actors' words is equivalent on 3 themes, in both the diagnostics and assessments: communication-coordination-consultation-cooperation, management style and work organization. These themes have a strong weighting in the diagnostics, 21 to 14% of the expressed problems, and in more than 94% cases. Their frequency is slightly lower in the assessments, with 19 to 14% of the improvements expressed, and this, in more than 85% cases.

The work atmosphere is the most often quoted theme of improvement (15%) in all the cases, while this theme represented only 10% of dysfunctions in 89% of the diagnostics. Two other themes have a stronger frequency in the assessments compared to the diagnostics: cohesion, strictly speaking, (50%), transversality (+22%) and, to a lesser extent, general organization (+10%).

Improvement factors of cohesion. The principal improvement factors expressed are the quality improvement of the service to internal and external customers (+600%), increase of the implication (+300% of expressions), the strategy multiplying (+200%), the work atmosphere improvement (+150%), the inter-services cooperation (+100%), the shared working methods (+100%), clarification in tasks allocation (+100%), the competences development through the integrated training (+50%), effectiveness of meetings (+33%), and the reduction of the decompartmentalization between experts and professions (+33%), as well as a strong reduction of problems concerning a lack of consideration to persons.

So, it appears that cohesion and its variation are inherently multidimensional, and perceived by the actors through a diversity of notions and key-words. A traditional lexical analysis, a fortiori automatic, could not allow analyzing the complex problematic of cohesion, considering the polysemy.

Furthermore, we have realized a deepen study on 40 companies and organizations cases, using in total 6 500 persons and leading endogenous and pro-active strategies of investment in human potential, according to the socio-economic intervention-research methodology. This study enables to demonstrate the very high profitability of the intangible investment (IIQDHP): between 210 and 4 014% (Savall & Zardet, 2007, 2008). And the great speed of the return on investment: from less than a month to six months. The analysis consisted in evaluate the intangible investment amount, and the increase of the value-added on variable costs, based on the general accountancy of the company.

Results are synthesized in figure 6 annexes B & C. In all the cases under consideration, the intangible investment in human potential has been self-financed starting from the first year, which proves the great speed of hidden-costs conversion into value-added; when we succeed in getting involved all the actors in a socio-economic innovation process, according to a learning process aiming to metamorphose the company operation.

Profitability rates of the IIQDHP	number	% of the sample	Return period of the IIQDHP	number	% of the sample
210 % to 980 %	5	7.5%	less than 1 month	1	50 %
1,000 % to 1,980 %	6	15%	Between 1 to 2 months	2	30 %
2,000 % to 3,000 %		5%	Between 2 to 3 months		5 %
3,000 % to 4,014 %		7.5%	Between 4 to 6 months		15 %
TOTAL	10	100%	TOTAL	10	100%

Figure 6. The 40 companies' breakdown according to the criteria of profitability and return on investment (IIQDHP)

The performance multiplier, or leverage effect, ranges from 2 to 40. If we consider that about half of dysfunctions is attributable to non-cohesion or the TFW virus, we can admit that we allocate 50% of the performance multiplier to cohesion improvement, whether 1 (in one company's case) to 20.

Some regulation mechanisms of the activity explain how the increase of cohesion makes it possible to increase versatility and a better team spirit, which facilitates absenteeism regulation, and then entails a reduction in a very disruptive kind of little absenteeism. This reduces non-productions and non-quality and results in an increase of revenue and value-added.

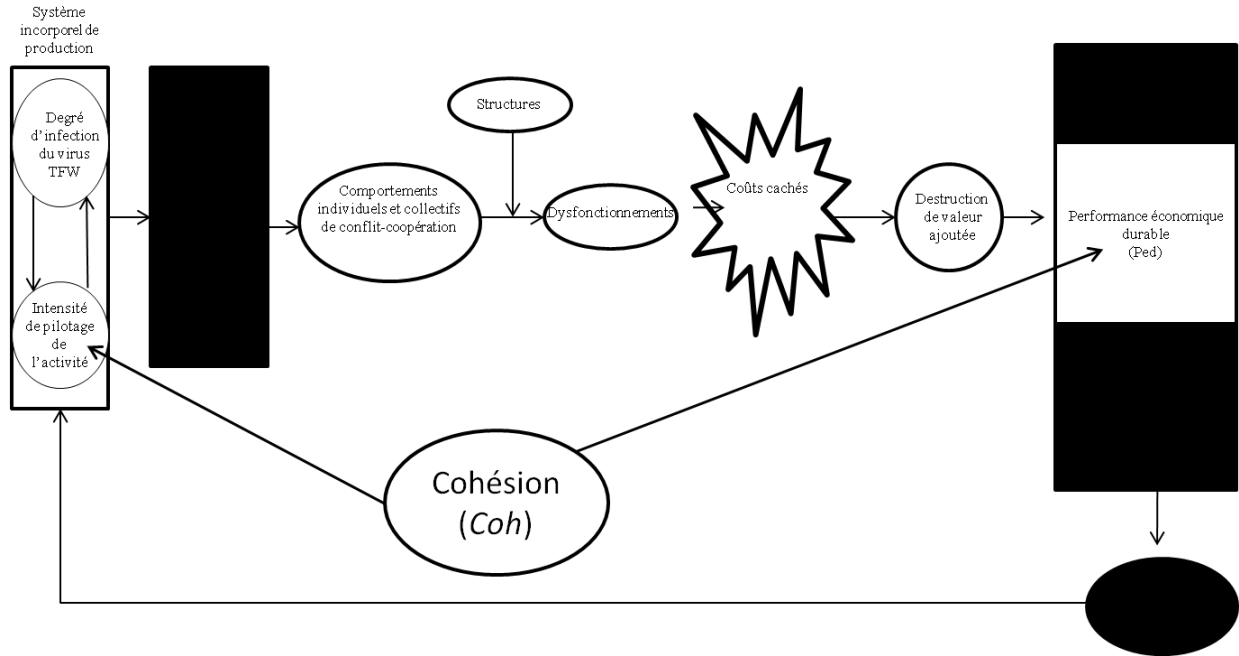
The increase in the cohesion level develops behaviors of work accident prevention, both from managers and basic personnel. One can also notice the positive effect of cohesion on the increase in the withholding capacity of the personnel, which induces a reduction of the personnel turnover. Cohesion has a positive effect on the technical quality level too and delivery deadlines, notably through the development of integrated training, self-control and intensification of cooperation practices within the activity process.

Likewise, the cohesion reduces direct productivity gaps, through the cooperation practices facilitated by versatility which allow reducing the sub-charges and surcharges of activity and work, in ensuring smoother flows.

Conclusion

The principles of organization and management proposed by the Traditional School (Taylor, Fayol, Weber) in a certain economic, technological, demographic and geopolitical context, at the end of the 19th century, are still considerably widespread in companies and organizations. Their anachronistic application in a context that has mutated since more than a century constitutes a deviance compared to the social performance objectives, - satisfaction – and economic performance, - development of value creation and salary – of the stakeholders. Principles, as hyper specialization of workstation and work position, dichotomy between conception and execution activities, as well as the depersonalization of process, methods, and organization chart, create henceforth many dysfunctions caused by the “TFW virus”. The content analysis of 35 companies and organizations cases allowed us to trace dissatisfactions due to the lack of cohesion, provoked by this “virus” on different actors’ categories, from the directors to the basic personnel, as well as the destruction of value-added resulting in hidden-costs, that is to say, an average of 29,000€ per person and per year. The analysis of 13 of these cases enables to characterize the improvement actions of social and economic performance, whose common element is an increase in cohesion and which constitutes a very profitable (210% to 4014%) intangible investment on qualitative development of human potential (IIQDHP). A leverage effect of the intangible investment in cohesion has been brought to light with a multiplier from 2 to 20, except for one case where the multiplier is close to 1, which corresponds to a refund period of a year, while the return on investment is largely less than one year for the other cases (1 to 6 months). The internal cohesion – bedrock of the organization – allows increasing the organization sustainable strategic performance.

Appendix A – The summary variable of cohesion: link between the intangible system of production and sustainable economic performance



Appendix B: Incidence of *the intangible investment on qualitative development of human potential* (IIQDHP) on sustainable economic performance development

INCIDENCE DE L'INVESTISSEMENT INCORPOREL (II) SUR LA CROISSANCE DE LA PERFORMANCE ECONOMIQUE DURABLE

N° d'ordre	Entreprise et secteur d'activité	COÛT DE L'INVESTISSEMENT INCORPOREL (II)												COÛTS CACHÉS INITIAUX (base annuelle)		CREATION DE VALEUR AJOUTÉE PAR RECYCLAGE DES COÛTS CACHÉS (base annuelle)				RENTABILITE DE L'INVESTISSEMENT INCORPOREL (II) D'INNOVATION SOCIO-ECONOMIQUE				
		Année(s) (initiale)	Effectif	Durée de réalisation de l'II	Durée de l'amortissement de l'II	COÛT EXOGENE	COÛT ENDOGENE	temps passé	valorisation à la CHVACV	II TOTAL	II total par personne	Amortissement annuel moyen total	Amortissement annuel par personne	RATIOS (base annuelle)		P/D	R/D	T/D	R/D	T/D	U/M	T-J	12xL/T	
														II / coûts cachés initiaux	Variation VACV									R/D
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
				années	k€	h	HxV/1000	G+I	J/D	J/F	L/D	L/P	T/R	k€	k€	k€	k€	k€	k€	€	%	k€	%	
1	Adm. Emploi Dreg	2003	126	2,5	5	133	370	13,7	146	1,16	29,3	0,23	1,22	10,5	2408	19,1	4510	35,8	471	3,74	37	1609	325	0,75
2	Adm. Emploi DRH	2002	47,6	2,5	5	163	444	17,3	180	3,79	36,0	0,76	3,28	10	1098	23,1	1704	35,8	170	3,58	38,9	473	-9,79	2,54
3	Adm. Emploi DRM	2002	73	2,5	5	196	540	21	217	2,98	43,4	0,60	2,01	19,8	2158	29,6	2612,8	35,8	517	7,08	38,9	1190	300	1,01
4	Banque	1985	181	1	3	57	5780	110	167	0,92	55,6	0,31	2,06	31	2700	14,9	5450	30,1	1690	9,34	19	3039	1523	0,39
5	Brioche P.	1984	112	1	3	75	2950	47,2	122	1,09	40,7	0,36	1,88	35	2164	19,3	4671	41,7	1635	14,60	16	4014	1513	0,30
6	Centre Financier	1990	164	1	3	148	4165	77,1	225	1,37	75,0	0,46	2,44	24,9	3080	18,8	5977	36,4	1490	9,09	18,5	1986	1265	0,60
7	Centre Tn postal M	1990	89	1	3	80	2260	41,8	122	1,37	40,6	0,46	3,73	14,2	1090	12,2	3244	36,4	460	5,17	18,5	1133	338	1,06
8	Centre Tn postal R	1990	174	2	4	157	4420	81,8	239	1,37	59,7	0,34	2,57	17,4	2320	13,3	6341	36,4	1105	6,35	18,5	1851	866	0,65
9	Indust. Arm. (1)	1990	1096	2	4	904	54600	1773	2677	2,44	669	0,61	2,11	2,5	31674	28,9	56115	51,2	1403	1,28	32,5	210	-1274	5,73
10	Indust. Arm. (2)	1992	894	2	4	738	44500	1445	2183	2,44	546	0,61	2,11	2,78	25836	28,9	45773	51,2	1273	1,42	32,5	233	-910	5,14
11	Indust. Arm. (3)	1992	1262	2	4	1041	62900	2042	3083	2,44	771	0,61	2,11	3,82	36471	28,9	64614	51,2	2470,5	1,96	32,5	320	-613	3,74
12	Indust. Electronique	1982	104	2	4	20,7	1518	22,9	43,6	0,42	10,9	0,10	1,14	19	954	9,17	386	3,7	73,4	0,71	15,1	673	29,8	1,78
13	Indust. Metallurgie	1980	800	1	3	9,88	904	6,89	16,8	0,02	5,99	0,01	2,99	100	187	0,23	38	0,0	38	0,05	7,62	680	21,2	1,77
14	La Poste (zone pilote)	1990	650	2	4	585	16510	305	890	1,37	223	0,34	1,45	15,9	15350	23,6	23726	36,5	3772	5,80	18,5	1694	2882	0,71
15	La Poste Bureau	1990	134	2	4	120	3403	63,0	183	1,37	45,7	0,34	3,49	19	1310	9,78	4883	36,4	930	6,94	18,5	2033	747	0,89
16	La Poste DRH	1990	22	1	3	20	559	10,3	30,3	1,38	10,1	0,46	3,75	23,7	270	12,3	802	36,5	190	8,64	18,5	1879	160	0,64
17	La Poste Mark. Prod.	1990	23	1	3	21	584	10,8	31,8	1,38	10,6	0,46	4,91	12,9	216	9,39	808	35,1	104	4,52	18,5	981	72,2	1,22
18	Mutuelle assur.	2004	206	2	4	484	7450	369	853	4,14	213	1,04	4,09	3,19	5217	25,3	16278	79,0	519	2,52	49,5	243	-335	4,94
19	Véhic. Secours (1)	2000	88	2	4	104	3658	34,6	139	1,57	34,64	0,39	1,88	10,3	1839	20,9	2876	32,7	297	3,38	9,45	857	158	1,40
20	Véhic. Secours (2)	2000	66	2	4	78	2742	44	122	1,84	30,40	0,46	2,20	24,2	1383	21,0	3761	57,0	912	13,8	15,9	2998	790	0,40
21	Agence Voyage	2005	14,6	1	3	11,5	341	8,18	19,7	1,35	6,56	0,45	2,78	20,4	236	16,2	636	43,6	130	8,90	24	1981	110	0,61
22	Bricolage	2005	16,6	1	3	11,5	413	9,38	20,9	1,26	6,96	0,42	4,30	13,9	162	9,76	660	39,8	92	5,54	22,7	1322	71,1	0,91
23	Expert Comptable	2004	3,6	1	3	11,5	177	9,74	21,2	5,90	7,08	1,97	5,40	20,6	131	36,4	344	95,6	71	19,7	55	1003	49,8	1,20
24	Indust. Câblerie	2005	9,5	1	3	11,5	225	9,45	21,0	2,21	6,98	0,74	8,52	8,88	82	8,63	687	72,3	61	6,42	42	874	40,1	1,37
25	Indust. Capteurs	2004	23,3	1	3	11,5	549	15,4	26,9	1,15	8,96	0,38	5,74	10,4	156	6,70	1035	44,4	108	4,64	28	1206	81,1	1,00
26	Indust. Coton tiges	2004	27,7	1	3	11,5	412	14,4	25,9	0,94	8,64	0,31	1,60	11,8	539	19,5	1617	58,4	191	6,90	35	2211	165	0,54
27	Indust. Extrusion	2005	5,7	1	3	11,5	227	5,58	17,1	3,07	5,69	1,02	11,39	17,6	50	8,98	239	42,9	42	7,54	24,6	738	24,9	1,63
28	Indust. Orgue(s)	2005	11	1	3	11,5	289	6,85	18,3	1,67	6,12	0,56	3,17	25,3	193	17,5	506	46,0	128	11,6	23,7	2093	110	0,57
29	Ingénierie informat.	2004	10,6	1	3	11,5	280	10,1	21,6	2,05	7,19	0,68	2,97	25,5	242	22,9	664	62,9	169	16,0	36	2349	147	0,51
30	Matériaux constr.	2005	9	1	3	11,5	273	9,01	20,5	2,28	6,84	0,76	2,05	52,5	333	37,0	463	51,4	243	27	33	3555	222	0,34
31	Services Informat.	2004	5	1	3	11,5	201	7,24	18,7	3,75	6,25	1,25	3,70	32,3	169	33,8	300	60,0	97	19,4	36	1553	78,3	0,77
32	Système Sécurité	2004	3	1	3	11,5	170	6,63	18,1	6,04	6,04	2,01	20,14	7,49	30	10,0	227	75,7	17	5,67	39	281	-1,13	4,27
33	Office notaire B	1998	6	1	3	9,07	195	7,41	16,5	2,75	5,49	0,92	9,09	13	60,4	10,1	615	103	80	13,3	38	1456	63,5	0,82
34	Office notaire C	1998	15	1	3	9,07	230	8,97	18,0	1,20	6,01	0,40	4,01	5,01	150	10,0	979	65,3	49	3,27	39	815	31	1,47
35	Office notaire D	1998	9	1	3	9,07	195	9,95	19,0	2,11	6,34	0,70	6,82	15,0	93	10,3	607	67,4	91	10,1	51	1436	72	0,84
36	Office notaire E	1998	8	1	3	9,07	195	8,39	17,5	2,18	5,82	0,73	3,34	20	174	21,8	601	75,1	120	15,0	43	2066	103	0,58
37	Office notaire F	1998	9	1	3	9,07	195	7,80	16,9	1,87	5,62	0,62	4,81	7,86	117	13,0	565	62,8	44,4	4,93	40	790	27,5	1,52
38	Office notaire G	1998	20	1	3	9,07	255	7,91	17,0	0,85	5,66	0,28	3,88	7,47	146	7,30	1017	50,9	76	3,80	31	1343	59,0	0,89
39	Office notaire H	1998	7	1	3	9,07	183	7,69	16,8	2,39	5,59	0,80	7,76	15	72	10,3	460	65,7	69	9,86	42	1235	52,2	0,97
40	Office notaire N	1998	6	1	3	9,07	195	7,61	16,7	2,78	5,56	0,93	7,94	4,34	70	11,7	631	105	27,4	4,57	39	493	10,7	2,43

Appendix C: Extraction of five organizations cases from Appendix B [Incidence of the IIQDHP] on sustainable economic performance development.

N° ordre	INCIDENCE DE L'INVESTISSEMENT INCORPOREL (II) SUR LA CROISSANCE DE LA PERFORMANCE ECONOMIQUE DURABLE										REINTEGRATION DE L'INVESTISSEMENT INCORPOREL (II) D'UN POINT DE VUE ECONOMIQUE																		
	Entreprise et secteur d'activité	Année(s) (initiale)	Effectif	Durée de réalisation de fil	Durée de l'amortissement de fil	COÛT ENCOÛLE	COÛT ENCOÛLE	COÛT ENCOÛLE	COÛTS CACHÉS (INITIAUX) (base annuelle)	COÛTS CACHÉS (base annuelle)	CREATION DE VALEUR AJOUTÉE PAR RECTIFICATION DES COÛTS CACHÉS (base annuelle)	Contribution horaire à la valeur ajoutée sur coûts variables initiale		TAXE RENTABLE FISCALE (II) (base annuelle)	VITESSE RETOUR SUR INVESTISSEMENT (II) (base annuelle)	PERIODE DE gain économique net													
			années	F	E	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y					
						€	h	1000	G-H	J-D	J-F	J-D	L-P	T-R	PID	PID	R-D	R-D	A	A	T-D	e	UM	T-J	12XUT				
									II TOTAL	II total par personne	Amortissement annuel moyen total	Amortissement annuel par personne	II / coûts cachés initiaux	Ratio (base annuelle)	total entreprise ou entité	par personne et par an	Valeur ajoutée sur coûts variables (VA/VCV) initiale	VA/VCV initiale par personne	REDUCTION DES COÛTS CACHÉS (base annuelle)	Δ VA/VCV moyenne annuelle	Δ VA/VCV annuelle par personne	€	%	€	mois				
1	Alim. Emploi/Déjà	2003	126	2,5	5	133	370	13,7	146	1,16	29,3	0,23	10,5	2408	19,1	4510	35,8	471	374	37	1609	325	0,75						
2	Alim. Emploi/DSM	2002	79	2,5	5	195	540	21	217	2,36	46,2	0,69	2,01	2177	29,6	26730	340	517	708	39,9	190	300	1,0						
3	Mobilié assure	2004	206	2	4	484	7450	369	833	4,14	218	0,4	4,09	3,19	3217	25,3	18278	79,0	519	252	46,5	248	-335	494					
4	Méhic. Sécurité (1)	2000	88	2	4	104	3658	346	139	1,57	34,64	0,39	1,88	1839	20,9	2376	32,7	297	3,38	9,45	837	158	1,40						
5	Méhic. Sécurité (2)	2000	66	2	4	79	2742	44	122	1,94	30,40	0,46	2,24	1383	21,0	3161	57,0	912	13,9	15,9	2988	780	0,40						
M1 Moyenne			111,80	2,20	4,40	199,00	2852,00	396,39	234,9	2,34	70,21	0,54	2,28	13,80	2600,94	23,17	8007,56	48,05	543,10	6,11	30,17	1378,59	247,71	1,70					
M2 Médiane			88,00	2,00	4,00	132,80	2742,00	34,57	146,49	1,84	34,84	0,46	2,01	10,45	2157,70	20,95	3781,00	35,79	517,20	3,74	37,00	1190,48	299,97	1,01					

Reference List

- ANACT (1979). *Le coût des conditions de travail*, Éd. ANACT, Paris.
- Ansoff, H.I. (1981-2010). Preface. In H. Savall, *Work and people: An economic evaluation of job enrichment*. 1st ed. New-York: Oxford University Press ; 2nd ed. Charlotte, NC: Information Age Publishing
- Boje, D. & Rosile, G.-A. (2003). Comparison of socio-economic and other trans-organizational development methods. *Journal of Organizational Change Management*, 16(1), 10-20.
- Bouvet J., Bidou D., de Vaivre A.-M. (2012). Mesure de la qualité des conditions de vie au travail, in Peretti (dir.) *L'encyclopédie de l'audit social et de la responsabilité sociétale*, EMS. [Measure of life conditions quality at work, in Peretti (dir.) *Encyclopedia of social audit and societal responsibility*, EMS.]
- Buono, A. & Savall, H. (Eds.) (2007). *Socio-economic intervention in organizations: The intervener-researcher and the SEAM approach to organizational analysis*. Charlotte, NC: Information Age Publishing.
- Cappelletti, L. (2012). *Le contrôle de gestion de l'immatériel - Une nouvelle approche du capital humain*. [Management Control of Intangible – A new approach of human capital]. Paris: Dunod.
- Coyle-Shapiro J. & Kessler I.(2000). Consequences of the psychological contract for the employment relationship: a large scale survey. *Journal of management studies*, 37(7), 903-929.
- De Backer P., (1972). Négociation et conflits dans l'entreprise : quelques indications d'application de la psychologie des conflits, *Metra*, vol.11.1, mars. [Negotiation and conflict in the organization: some application indications of the conflicts' psychology]
- Delobbe, N. et al. (éd.) (2005). *Comportement organisationnel, contrat psychologique, émotions au travail, socialisation organisationnelle*, De Boeck.[Organizational behaviour, psychological contract, emotions at work, organizational socialization]
- De Montmollin M., (1974). Taylorisme et anti-taylorisme, *Sociologie du travail*, octobre-décembre. [Taylorism and anti-taylorism, Sociology of Work]
- De Montmollin, M. (1981). *Le Taylorisme à visage humain*. [Human face of Taylorism]. Paris, France: L'Harmattan.
- Fayol, H. (1916). *Administration industrielle et générale*. [Industrial and overall administration]. Paris, France: Dunod.
- Friedmann G., (1956). *Le travail en miettes*, Gallimard. [Work in tatters.]
- Gervais M., (1979, 2011). *Stratégie de l'entreprise*. Economica. [Business strategy]
- Gibson, C. (1973). Volvo increases productivity through job enrichment. *California Management Review*, 15(4), 64-66.
- Herrick N., (1975). La qualité du travail et ses resultants: gains de productivité potentiels, *The Academy for contemporary problems*, Columbus, Ohio, september [Quality of work and its resultants : potential productivity gains]
- Hoarau C. & Teller R.(2001). *Création de valeur de l'entreprise. Identification, mesure, management*, Éd Maxima. [Value-creation of the organization. Identification, measure, management]

- Louche C. (2001). *Psychologie sociale des organisations*, Armand Colin. [Social psychology of the organizations]
- Lussato, B. (1977). *Introduction critique aux théories d'organisation* [Critical introduction to organizational theories]. Paris: Bordas.
- Merck B., Sutter P.-E., Baggio S., Loyer S., Landier H. (dir.) (2009). *Évitez le stress de vos salariés*, Eyrolles. [Avoid the stress from your employees]
- Neveu, J.-P., & Thévenet M., (éd.). *L'implication au travail*. Vuibert. [Involvement to work]
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York, NY: Wiley.
- Peretti, J.-M., (dir) (2012). *L'encyclopédie de l'audit social et de la responsabilité sociétale*. EMS. [Encyclopedia of social audit and societal responsibility]
- Perroux, F. (1975). *Unités actives et mathématiques nouvelles. Révision de la théorie de l'équilibre économique général* [Active unities and new mathematics. General equilibrium theory revision]. Paris, France: Dunod
- Perroux, F. (1979). L'entreprise, l'équilibre rénové et les coûts « cachés » [The enterprise, the renovated balance and the 'hidden' costs]. Preface in Savall, H. *Reconstruire l'entreprise* [Rebuild the enterprise] Paris, France: Dunod. 2nd ed.
- Savall, H. & Zardet, V. *Reconstruire l'entreprise* [Rebuild the enterprise], Paris: Dunod (2014)
- Plane J.-M., (2012). *Théorie et management des organisations*, Dunod. [Theory and management of organizations]
- Reif W. E., Luthans, F. (1972) Is job enrichment profitable?, *California management review*, 15(1).
- Reynaud J.-D. & Rémy P.-L.,(dir.)(1974). Les aspects techniques, économiques et financiers de la valorisation des tâches d'exécution, *Rapport au Ministre du Travail*, mai. [Technical, economic and financial valuation of the implementation tasks, *Report to the Minister of Labour*]
- Savall, H. (2012). *Origine radicale des crises économiques: Germán Bernácer, précurseur visionnaire* [Root origin of crises: Germán Bernácer, a visionary forerunner]. Charlotte, NC: Information Age Publishing.
- Savall, H. (2003). An update presentation of the socio-economic management model and international dissemination of the socio-economic model. *Journal of Organizational Change Management*, 16(1), 33-48.
- Savall, H. (1981-2010). *Work and people: An economic evaluation of job enrichment*. 1st ed. New-York: Oxford University Press; 2nd ed. Charlotte, NC: Information Age Publishing
- Savall, H. (1979). *Reconstruire l'entreprise : Analyse socio-économique des conditions de travail* [Rebuild the enterprise: Socio-economic analysis of working conditions]. Paris, France: Dunod.
- Savall, H. (1978). Articles : « Bernácer » et « Perroux », in *Encyclopédie de l'Économie*. Larousse.
- Savall, H. (1974a). Avant Keynes et au-delà: Germán Bernácer, économiste espagnol. *Revue Mondes en développement*, 5. [Before Keynes and beyond: Germán Benácer, spanish economist, *Revue : Worlds in development*]
- Savall, H. (1974). *Enrichir le travail humain dans les entreprises et les organisations* [An economic evaluation of job enrichment]. Paris: Dunod.

- Savall, H., & Zardet, V. (2014). *Reconstruire l'entreprise : les fondements du management socio-économique* [Rebuild the enterprise: socio-economic management basis]. Paris: Dunod.
- Savall, H. & Zardet, V. (2013a). Linking individual, organizational and macro-economic performance levels: Hidden costs model. Paper presented at the Academy of Management, Lake Buena Vista, FL (August).
- Savall, H. & Zardet, V. (2013). *The dynamics and challenges of tetranormalization*. Charlotte, NC: Information Age Publishing.
- Savall, H. & Zardet, V. (2012, octobre) Nouvel énoncé de la théorie socio-économique des organisations et des territoires [New statements of the socio-economic theory of organizations and territory]. Lyon, France: Cahier de recherche ISEOR.
- Savall, H. & Zardet, V. (2011) *The qualimetrics approach: Observing the complex object*. Charlotte, NC: Information Age Publishing.
- Savall, H. & Zardet, V. (2008). *Mastering hidden costs and performance*. Charlotte NC: Information Age Publishing.
- Savall, H., & Zardet, V. (2007). L'importance stratégique de l'investissement incorporel: résultats qualimétriques de cas d'entreprises [The strategic importance of intangible investment : qualimetric results of company cases]. In Colloque IIC-ISEOR-American Accounting Association, Lyon, France (June).
- Savall H., & Zardet, V., (2005). *Tétranormalisation : Défis et dynamiques* [Tetranormalization: Challenges and dynamics]. Paris, France: Economica.
- Approche qualimétrique, Observer l'objet Complexe* [Research in management sciences: The qualimetric approach, observing the complex object]. Paris, France: Economica.
- Savall H., Zardet V., (1996, 1997)). Vers la « pensée en action » stratégique ou le non-dit dans le discours sur la stratégie. Propositions pour améliorer la qualité scientifique des recherches en stratégie, *Revue Management international*, septembre 1997. [To the strategic « thought in action » or the “non-dit” in the speech on strategy. Proposals to improve the scientific quality of the strategy researches. *Revue International Management*
- Savall, H. & Zardet, V. (1995). *Ingénierie stratégique du roseau, souple et enracinée* [Strategic engineering of the reed, flexible and rooted]. Paris, France: Economica. 2nd ed, 2005.
- Savall, H. & Zardet, V. (1987). *Maîtriser les coûts et les performances cachés* [Mastering hidden costs and Socio-economic performance]. Paris, France: Economica. 5th ed, 2010.
- Savall, H., Zardet, V. & Bonnet, M. (2009). *Management socio-économique : une approche innovante* [Socio-Economic Approach to management. An innovative approach]. Paris, France: Economica.
- Savall, H., Zardet, V., & Bonnet, M. (2000, 2008). *Libérer les performances cachées par un management socio-économique* [Releasing the untapped potential of enterprises through socio-economic management]. Geneva, Switzerland: International Labour Office.
- Savall, H. Zardet, V., & Bonnet, M. (2000, 2008). *Releasing the untapped potential of enterprises through socio-economic management*. Geneva, Switzerland: Editions BIT.
- Savall, H., Zardet, V., & Péron, M. (2011). The “evolutive” and interactive actor polygon in the theater of organizations in D. Boje (Ed.), *Storytelling and the future of organizations: An antenarrative handbook*. New York, Routledge, États-Unis.

- Tabatoni, P. & Jarniou, P. 1975). *Les systèmes de gestion. Politiques et structures*, [Management systems. Policies and structures] PUF.
- Taylor, F., (1911). *Principes d'organisation scientifique des usines* [Principles of the scientific organization of factories], Paris: Dunod, 1985.
- Trist, Higgin, Murray, Pollock, (1963). *Organizational choice*. Tavistock Publications, London.
- Weber, M. (1924-1964). *The theory of social and economic organization*. New York, NY: Free Press.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.

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