Efficiency, Effectiveness and Ethics: Proposal for a Control System for Health Organizations

Sandra Bertezene
Le Cnam, Paris (France)
email: *sandra.bertezene@lecnam.net*

David Vallat
University of Lyon (France)
email: *david.vallat@univ-lyon1.fr*

Jacques Martin
ESOE
email: *jma.martin@wanadoo.fr*

Abstract

Health organizations undoubtedly need some sort of control system in order to evaluate their performance in all its dimensions. Until now a number of different systems have been worked out and implemented but without any global strategic vision and articulation between the different objectives and indicators used. This paper aims at proposing a synthetic model of control based on three dimensions (efficiency, effectiveness and ethics) ensuring the coherence of the strategy, the objectives and the indicators.
Purpose: Proposing a shared control system for health organizations.
Methodology: Constructive
Findings: Until now no real synthetic and coherent control system has been devised and implemented.
Practical implications: A model and tool for health organizations
Originality/value: one of the first comprehensive control model for health organizations.

Introduction

The definition of a system of organizational control in the health sector appeared necessary as early as the 1990s with the implementation of various major reforms in the spirit of the New Public Management. A report by the IGAS published in 2012 points to "an insufficient articulation between the inspection-control function presently exercised by the territorial networks and the other approaches aiming at improving the quality and safety of care in establishments (Schaetzel and Tregoat, 2013). The missions of the inspection-control function have objectives which are independent one from the other (quality inspection, negotiation for contracting, etc.), and separate between the sanitary sector and the medical and social sector. Another report of the IGAS in 2013 adds that there is "a piling-up of approaches without strategic vision and readability" (Schaetzel and Tregoat, 2013) at the level of the supervising authorities as well as that of the establishments.

The articulation between the different types of control within a single system has largely been studied in the academic literature (cf. for example Merchant and Van der Stede, 2007; Malmi and Brown, 2008). In spite of the existence of ample literature, there is limited research devoted to the manner in which these different types of control could be articulated and merged together within a single system (Malmi and Brown, 2008). Working on this theme presents a real academic interest and also a more professional one related to the field of the research. This context raises a central question: which system of organizational control could be implemented in sanitary, social and medical organizations in order to avoid the piling-up of approaches and help in decision-making? The hypothesis formulated to answer this question is that different types of evaluation and internal approaches that sustain the control could inter-act inside a single system as long as a systemic vision of the organization is adopted.

The system here proposed is seen as threefold with three interdependent dimensions centred on efficiency, effectiveness, and ethics whose core is the shared scorecard.

In order to propose an answer to the question and test the hypothesis, this paper presents the particular context of organizational control in such organizations in a first part, and, in a second part, the theoretical and epistemological framework of the research. The third part presents our model of shared organizational control system at the same time objective, subjective and inter-subjective with the shared scorecard. Later this model will be tested inside an establishment.

1. Organizational Control in Sanitary, Social and Medical Organizations

The evaluation approaches in sanitary, social and medical organizations present two difficulties: one the one hand, they are sundry but do not offer a strategic vision of control (1.1.), on the other hand they suffer from the confusion nourished by the overseeing authority about the objectives of the evaluation (1.2.). To that, we can add difficulties related to the culture of the sector not prone to accept control (1.3) and those related to the environment of the organizations, nowadays moving and uncertain to which the very characteristics of control seem to be little adapted (1.4).

1.1. A plethora of evaluation approaches and indicators without a strategic vision of control

In order to see more clearly in the piling-up of approaches without strategic vision and readability denounced by the IGAS, we will first look at the main regulatory obligations and other approaches pushing organizations to deploy different evaluation processes (Bertezene, 2018).

1.1.1. The juxtaposition of evaluations demanded by regulations

In the French context, to start with, the strategy of the organizations is evaluated, at least partially, by the overseeing authority within the framework of the 'multi-annual contracts of objectives and means'. This contract approach exists both for sanitary establishments (Law of 24 June 2009) and for social and medical ones (Law of 2 January 2002). This contract is established between an establishment and some service pricing body for a maximum of 5 years. The organization commits itself to reaching certain objectives in terms of service or activity development, quality improvement, etc. As a counterpart it receives a budget allowance from the body. The official Health-Social protection - Solidarity bulletin (15/10/2014) proposes a guide for objectives and monitoring indicators for these contracts. This guide proposes 'common priority and operational national objectives; a regional version for each Regional Health Agency, permitting to articulate the national priorities with quantitative targets at the national level and differentiated targets at the regional level depending on the local contexts and the efforts already made'.

The quality is also the object of a regular evaluation by the overseeing authority. In the hospital sector, certification has been an obligation since April 1996. The purpose of the certification is to evaluate the quality and safety of the care provided and all the services of the establishments. It takes, among other things, into account the internal organization and the satisfaction of patients (High Health Authority, 27/11/2013). This external evaluation of quality is carried out every four years by independent experts. They provide a report permitting the certification of the establishment. The certification process then requires an approach of continuous improvement of the quality to guarantee the conformance of practices with the requirements of the referential. Since 2002 it has been the same for social and medical establishments. External evaluations are carried out by independent auditors.

The objectives stated in the contract are supposed to appear in the 'establishment project', formalized for 5 years, with the possibility of revising it if needed. The 'establishment project' defines the general objectives in the medical area, the bio-medical research, the social policy, the training plans and the management of the information system, and sets the means necessary to achieve these objectives. It is the same in the social and medical sector.

1.1.2. The superposition of voluntary evaluation approaches

As noted in the report of the IGAS, the approaches for drafting a project, preparing a contract and leading a quality policy are carried out independently whereas they should be articulated one with the other under common objectives. Other obligatory internal approaches for 'control' or 'inspection' come to be grafted to these major processes. For example, in the sanitary sector, a radio-therapy unit can be inspected by bodies having a power of inspection but also by other institutions (health insurance), leading to a situation where there can be a confusion of roles (Schaetzel and Tregoat, 2013). Besides these legal obligations, the National Agency for supporting performance also proposes scorecards to the management of sanitary, social and medical organizations. There is for example a scorecard with 337 indicators (!) along four axes (care, human and material resources, finance, objectives).

Health organizations can also develop their own projects, such as ISO certification or sustainable development. The whole thing leads to a sort of magma which is extremely time-consuming and becomes rather meaningless, and should encourage managers to work out an integrated organizational control allowing an easier and more effective monitoring of the organization.

On top of, or besides, the plethora of evaluation approaches, another difficulty must be taken into account; the culture of the sector which is wary of evaluation and control.

1.2. A culture far from control in an uncertain environment

To complete the picture of the sector, two other major difficulties are analyzed: the presence of 'values' hardly compatible with control and the changes in the external environment.

1.2.1. Values and control

The very culture of this sector of activity encompasses 'humanist values translating in terms of physical and moral health the respect and the dignity of the individual, non-discrimination and equality of treatment' (Molinié, 2005). On the one hand, management tools can appear as rigid and constraining, and their appropriation is often more relevant to individual strategies; on the other hand, the very nature of these tools leads the actors to consider their activity as following a 'managerial logic' and not devised for the 'common good'. For example, hospital staff denounce the absence of consideration of difficult working conditions in the certification process; the demand for reporting leads to discouragement, even uselessness, even the more so as a lack of progress in quality and safety is felt (HAS, 2012). As the culture is engrossed with the feeling of working for the 'common good' (Nonaka and Zhu, 2012), health professionals tend to oppose the values of the organization and the tools brought by the technostructure. The budgetary pressure re-enforces this phenomenon and creates resistance and even manipulation of data (Georgescu and Naro, 2012). In spite of the overseeing authority's efforts to spread a culture of control and spell out confusion about the nature of evaluation and control, professionals remain widely reticent towards indicators.

Inside organizations, the word 'evaluation' is preferred to 'control', of which professionals remain suspicious. Control is indeed often understood as a means of sanctioning rather than rewarding. There are instances where the authorization to operate has been withdrawn after a control, whereas the establishment had just been confirmed after the good results of an external evaluation (Schaetzel and Tregoat, 2013).

This situation makes it difficult to adapt to an environment which is more and more uncertain.

1.2.2. The establishments and a volatile and uncertain environment

The way of conceiving control evolves with the global context. The economic environment becomes more complex, it is transformed by globalization (big listed groups, 'health tourism', etc.) and the passage to 'economies of knowledge'. This new environment can be characterized by the acronym VUCA (volatility, uncertainty, complexity, ambiguity) (Johanson, 2007).

- It is volatile as the effects of change can be hardly anticipated (Boston Consulting Group, 2012). We can mention the phenomenon of concentration, mergers and acquisitions where health organizations are managed like 'ordinary' companies, the emergence of partly public and partly profit-seeking organizations (Robelet et al., 2009), the shortage of resources leading to a purely 'managerial' approach disrupting the traditional equilibrium.
- It is uncertain as it is impossible to master all the parameters of the environment and anticipate changes. Past experience is no longer a guide for the future (Taleb, 2010). Understanding this uncertainty has become a major stake for the strategy of organizations (McCann, 2009) ;
- The complexity of the environment comes from its systemic dimension. Interactions between all the factors (economic, political, social) are very hard to grasp. The complexity

re-enforces the uncertainty and challenges the Western positivist conception of knowledge formation (Morin, 1986 ; Morin and Le Moigne, 1999) ;

- There is ambiguity because it is not easy to interpret clearly the phenomena observed, leaving the door open to errors of interpretation (Taleb, 2010) as was the case with the heat wave in 2003 or the bird flu in 2009 or other epidemics (Ebola).

After this panorama of the field of study with its constraints in terms of organizational control, the next part will draw the theoretical framework of the research.

2. Theoretical and Epistemological Framework of the Research: Shared Control and Constructivism

The theoretical framework of the research corresponds to a context where regulations nourish confusion about control, and culture is not favourable to the idea of control (2.1). This first point is important to understand better the constructivist epistemological approach adopted (2.2), in adequacy with the VUCA world of health organizations.

2.1. The theoretical framework of the research: the interactive control of Simons (1995)

The model proposed in this paper is constructed on the basis of two complementary theoretical approaches: the interactive control of Simons and the balanced scorecard of Kaplan and Norton (1996).

2.1.1. The interactive control of sanitary, social and medical organizations

There are four control levers identified by Simons (1995): the systems of beliefs, the systems of limitation, the systems of 'diagnostic control' and the systems of 'interactive control'. The first two are part of a logic of strategic control. The systems of beliefs correspond to the values borne by the organization and its raison d'être. The systems of limitation correspond to the risks to avoid. The other two categories refer to the formulation and implementation of the strategy and pertain to the management control.

The interactive control defined by Simons (1995, 2000) not only facilitates the strategic implementation but also its definition and deployment in a logic of knowledge management and organizational learning. Control thus becomes "a formal process and procedures based on the information used by managers to maintain or modify certain arrangements of the organization's activities" (Simons, 1991). The interactive control brings a new dimension to control by articulating it with the strategy thanks to the implementation of different principles (Bisbe et al., 2007): the use of interactive control by the management, the instauration of discussions, the favourable attitude towards discussion and the emergence of innovation and the attention paid to uncertainties. The interactive control helps in the strategic decision-making by the top management and the operational decisions by the middle managers (Renaud, 2013). Even if this is not clearly advocated by Simons, it is possible to think that the interactive control can also be useful for operational decisions made by personnel without hierarchical responsibility. We state the hypothesis (Mintzberg, 2002) that in this way the responsibility of all in the definition and implementation of the strategy favours collective implication and commitment, and hence performance.

The interactivity comes from the discussion between different hierarchical levels and different services or activities gathered around a common project (Berland and Persiaux, 2008). Regular discussions entice managers to pay attention to threats and opportunities, which

stimulates innovation. In sanitary, social and medical establishments, this innovation can concern new medical protocols, but it will most often concern various organizational changes (work organization, training, risk mitigation, etc.). The interaction coming from the discussion between individuals is the source of all organizational learning (Argyris, 2003) and production of knowledge (Nonaka, 1994), permitting to apprehend and face strategic uncertainties better (Dambrin and Löning, 2008) thanks to a system devised as "a catalyst for debates, a constant challenging of hypotheses and action plans" (Simons, 1995).

2.1.2. The balanced scorecard: a tool for control

The Balanced Scorecard is the best adapted tool for organizational control for two main reasons: a number of authors have shown its relevance for an interactive control (Vaivio 2004; Naro and Travaillé 2010) and its use in sanitary, social and medical organizations is largely encouraged and experimented (Kaplan and Norton, 1996; Forgione, 1997; Chow, 1998). The BSC is made up of 4 interdependent axes comprising indicators chosen by the establishment: internal processes, organizational learning, customers and finance. The BSC permits to take into account the articulation between strategic and operational indicators so that specific approaches (quality, well-being, etc.) fit with the strategy. This tool presents four advantages. First it can be put in place in all types of establishments, second it is built and fed collectively, third it breaks vertical and horizontal barriers, fourth it favours the formalization and implementation of the processes that create most value (Kaplan et Norton, 1996; Lorino, 2003).

The BSC however can present some limitations. For example, the societal dimensions remain often linked to the financial performance (Naro, 2005), which can be harmful to a strategy intending to take into account the complexity of the environment in a sector where the societal dimensions are pre-eminent. There is also the danger of constructing a BSC with too many and too rigid indicators so that the strategic intent is lost of sight, or on the contrary too few indicators so that the monitoring of the organization is insufficient. The right balance must be struck.

In spite of possible shortcomings, it is possible to deploy the tool in all its dimensions to make of it a lever for control as long as it is constructed with all the managerial contributions in the organization and integrated into the context of the internal and external environments of the sanitary, social and medical establishments.

On this basis, it is now important to make the epistemological choices explicit.

2.2. The epistemological framework of the research: systemic and constructivist

The model proposed is shaped thanks a systemic and constructivist approach of the system of interactive control.

2.2.1. A systemic perspective of the organization

Acting in and on a VUCA world in a sector that wants to bear humanist values requires complex thinking. The project of action is worked by using uncertain means for uncertain objectives in a constant play of actions, reactions and feedback. 'Systemism' (or complexity) aims at making interactions visible. It is multi-dimensional, cross-disciplinary and 'dialogic' (Morin, 1986). The reality observed of the world is a chaos of interactions where knowledge is to help us making this chaos intelligible so that we can act. Thinking within complexity is observing the reality like a woven fabric (complexity: what is woven together) with inter-linked heterogeneous elements. At times, in complexity, the whole is more than its parts; at times it is less. It is necessary then to conceive at the same time 'the one in the multiple and the multiple

in the one', which goes against disjunctive thinking in the Cartesian tradition. In thinking complexity, we can go beyond this (Morin, 2005) by relying on the principles underlying complexity.

- The 'dialogic' principle to overcome the contradiction of the conjunction of contrary elements;
- The principle of 'organizational recursion': loops of causes and results in constant feedback. The individual is the product of society which is the product of individuals. The classic cause-effect schema is broken, for example in 'agile management' (Schwaber and Beedle, 2001) ;
- The 'hologramatic' principle which states that the whole is in the part and the part in the whole.

  This approach is particularly fertile to grasp the systemic dimension (Le Moigne, 2007) of the reality observed by re-introducing the subject (and hence subjectivity) which was eliminated by the positivist philosophy. When we eliminate the subject, we eliminate the complexity (Morin, 1999). Organizations are submitted to entropy. Hence they need to create neguentropy to survive in the way living organisms do (Morin, 2005).

This epistemological approach seems to be adapted to the field of study due to its complexity. Establishments are submitted to a number of influencing factors (political, economic, social, institutional, technological) at the origin of this complexity which, in turn, influences the creation and functioning of the management control (Abernethy et al., 2007) in particular and of the organizational control in general. By adopting a systemic approach, the managers of establishments can understand their decisions as the result of a system that influences its environment, the latter influencing the system made of interactions loops.

We can now complete this systemic approach with constructivism to understand the model proposed.

2.2.2. A constructivist research

According to the constructivist epistemology (von Glasersfeld, 2004; Le Moigne, 2007), knowledge is the result of a construction of subjective interactions between men and the objects studied. This approach moves away from the traditional notion according to which all human knowledge could near a more or less 'true' representation of an independent or 'ontological' reality. Instead of pretending that knowledge could represent a world beyond our experience, all knowledge is considered as a tool within the domain of experience (Von Glasersfeld, 2004, p. 166).

On the one hand, constructivism is particularly adapted to a VUCA world as it re-enforces a progressive organizational learning founded on interactions and social relationships. On the other hand, it is at the heart of organizational control as envisaged by Simons (1995) as shown by Dambrin and Löning (2007) who make out four constructivist themes in Simons' theory: control tools as a language to represent reality, interactivity of the control systems as a source to develop knowledge, the link between strategy and control making theory and action inseparable, and the integration of uncertainty into the control systems.

According to Bandura (1976), learning can be realized through observation; thus organizational learning results, in part at least, from the social interactions taking place in the workplace (Brown and Duguid, 1998). Learning is then thought as a process aiming at elaborating contextualized and operational ('actionable' according to the word of Argyris et al., 1985) knowledge. Learning is no longer the means to know the world but to construct collectively a place inscribed in systemic interactions between the stakeholders (Spender,

1996). In the same way, Tsoukas (1996) argues that the organization constantly (re)constructs knowledge through interactions between expectations and social practices.

On the basis of these theoretical foundations, the following part shows the model of shared control. This 3E model (Efficiency-Effectiveness-Ethics) rests on objectives, subjective and inter-subjective dimensions as defined by Nonaka and Zhu (2012).

3. Proposal for a Shared Control System Model and Tool Adapted to the Health

The systemic/complex and constructivist approach supposes to:

- Develop an organizational culture oriented towards shared control translated through values advocated by the management and shared by all, being the touchstone of the organization ('hologramatic' principle);
- Take into consideration the opinions of each member to make innovating strategies emerge ('dialogic' principle). This implies the implementation of discussion means between managers and their subordinates with regular exchanges and feedback ;
- Define strategic objectives and implement actions thanks to the collectively managed control system managed whatever the activity or hierarchical level. The actions flowing from the strategy are devised in short, medium and long-term systemic terms (recursion principle).

These three criteria are present in the shared control system proposed, entitled '3E' for the three dimensions of efficiency, effectiveness and ethics.

3.1. The efficiency dimension of the shared control system:

The positivist values of the scientific organization of labour of Taylor are embodied in the mechanistic and professional bureaucracies defined by Mintzberg (2002). Work is specialized and standardized, particularly in mechanistic bureaucracies, procedures are formalized, control is strict and strategies are formally planned. A bureaucracy implies a purpose-driven rational behavior (*zweckrational*) according to Weber (1995). An individual does not operate by expressing 'affects' nor by tradition, which is the opposite of the values advocated by health professionals and which explains the tensions described earlier.

When a bureaucratic organization is submitted to a drastic budgetary rationalization by some overseeing authority, it tends to favour the respect of the rule and cost-cutting rather than looking for dysfunctions causing waste. Efficiency is privileged to the detriment of projects of change and innovation which involve costs and whose results are not immediate. This is what happens in health organizations. Health professionals, notably concerning hospital certification, resent the predominance of the respect of the rule over the construction of a common project. The search for (pure budgetary) efficiency becomes an end in itself and in the end goes against effectiveness and meaningfulness (Weick, 1993), whereas it should be the opposite.

In spite of that, our model supports an objective dimension of control, that is an analytical, rational one oriented towards efficiency in order to:

- Guarantee the presence of a shared organizational control system which couples the search for immediate results and the creation of middle and long-term potential, as the two are not contradictory and can complement each other. The organization could foster the aptitude to innovate, the management of strategic uncertainties, and emerging strategies through an interactive control. And it could also master critical variables of the performance of mature and stable activities in the implementation of deliberate strategies through a diagnostic based control system (Naro and Travaillé, 2010) ;

- Meet the requirements of the overseeing authority which imposes some sort of diagnostic based control aiming at efficiency ;
- Care about the allocation and use of resources in a constraining economic environment
  However, this efficiency dimension *must* be coupled with the second dimension of effectiveness.

3.2. The effectiveness dimension of the shared control system: organizational learning to adapt to a VUCA world

A VUCA environment requires a strategy coupled with an interactive control to progress in an uncertain and random world by using information coming up in action, integrating them, formulate new action schemata and be able to gather as many certainties as possible to face uncertainty (Morin, 1990). Organizational learning is the means to adapt to this VUCA context.

The effectiveness dimension in such a world requires from health organizations to:

- Constantly challenge routines (Levitt and March, 1988) and to integrate organizational learning in a dynamic way to adapt rapidly (Argyris, 2003) ;
- Think of the organization and position it within its ecosystem (Johansen, 2007).

If these two conditions are met, health organizations will be in a position to meet the challenges of the VUCA environment and be effective in the sense of being creative, able to develop a vision (Senge, 2006) and be meaningful (Weick, 1993). Thanks to the subjective dimension of organizational control, the volatility is counterbalanced by a long-term vision and a strong strategic orientation communicated to all the actors to reassure them (Senge, 2006). Uncertainty is fought against through understanding, that is listening to internal and external stakeholders (Nonaka and Zhu, 2012). Complexity is mastered through experimentation and simulation (Simon, 1969). And ambiguity requires that corrective adjustments are rapidly implemented (Hébert, 2009).

The search for efficiency and effectiveness still is not sufficient to guarantee the adaptation of the behavior of actors to the changes proposed by a shared control system. That is why the third dimension, the ethical one, is required in the model.

3.3. The ethical dimension of the shared control system:

This last inter-subjective dimension of the shared control rests on the notions of ‘living together’, the vision of society, the shared values and the common good that we can sum up in the word ethics (Nonaka and Zhu, 2012).

According to Malmi and Brown (2008), culture is a key element of control systems. Here the culture is characterized by belonging to a certain profession (medical doctors, managers, nurses) and the respect of the rules provided by the overseeing authorities and the hierarchy. The challenge is to go beyond the bureaucratic and ‘clannish’ logic (Ouchi, 1979) to establish dynamic vertical and horizontal exchanges (Berland and Persiaux, 2008). In our case vertical exchanges are both top-down and bottom-up. Horizontal exchanges take place independently of the hierarchy and profession. Such a way of acting is most of the time foreign to today’s practice but they can be effective to answer sudden changes inside, and outside, health organizations.

These interactions can be facilitated by resorting to the ‘ethics of discussion’ of Habermas (1992) which does not focus on the adaptation of the means to the objectives, but rather on the adaptation of the means to the values, especially moral ones. Consequently the rules of a communication which permits peaceful exchanges between opposite opinions need to be

adopted. This implies a discussion that takes into account the opinions and points of view of all the persons involved in order to come to agree on a norm which will be considered as moral. Through the discussion, the norm and its impacts on all the persons concerned can be evaluated. Thanks to this collective work, it becomes easier to decide in an impartial way and adopt the fairer and more moral norm that will be accepted by everyone (Habermas, 1992).

In order to make this discussion more operative, the theory of knowledge management proposes to create a place destined to discussion, called Ba (Nonaka, Konno, 1998) where interactions can flourish and a shared culture respecting the opinions of everyone can emerge.

The knowledge thus produced of course only becomes actionable if there is a real strategic vision as seen previously (Prax, 2012).

The ethical dimension can facilitate the completeness and sustainability of the shared control system.

3.4. The tool for the shared control system: the Shared Scorecard

Kaplan and Norton (1996) propose the BSC with a logic of organizational control along four axes for monitoring the strategy. This structure can be adapted to the shared scorecard. The shared scorecard is founded on the strategic vision of the management to create a co-construction of the strategy (management and all the personnel), and the co-feeding of the indicators. In this way the personnel of all kinds feels and is more responsible as they all make shared decisions thanks to the information provided by the indicators. As a result, the shared scorecard is a means of managing better in the VUCA world, and overcoming the suspicion towards control.

The shared scorecard offers a synthesis between two ideal types identified by Choffel and Meysonnier (2005); one focuses on a decentralized management founded on a shared culture, the other is oriented towards budgetary management, but in a scalable way.

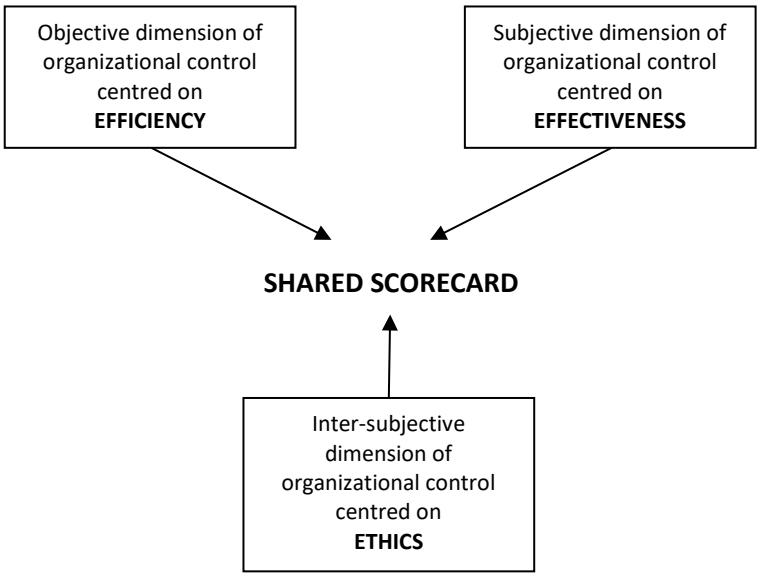
An interactive control requires a limited number of indicators focused on the specific and most sensitive problems of the sector of activity. On the contrary the diagnostic control (Simons, 1995) is achieved through a big number of indicators to monitor the performance in its various guises (economic, quality, societal). The shared scorecard lies somewhere between these two types of control. It groups the (many) indicators necessitating a regular reporting and the (few) indicators which are specific to the establishment and collectively chosen. In this way the indicators for regular reporting (imposed by the overseeing authority) can be more easily accepted by the personnel.

The effectiveness of the shared scorecard will naturally be better if the latter is computerized and automated to give more complete and reliable information (Saulpic and Ponsard, 2000, Travaillé and Marsal, 2007).

The shared scorecard shows the interactivity of the three dimensions to ensure a democratic and collective evaluation and avoid dodging attitudes on the part of the personnel:

- An objective, analytical and rational dimension for efficiency ;
- A subjective dimension for creativity, vision and meaningfulness ;
- A relational inter-subjective dimension for the ‘living together’, the vision of society, the shared values, the common good and ethics.

Figure n.1: Model of the 3^E shared control system



Conclusion

The various control approaches put in place in the sanitary, social and medical sector more or less share the same objectives but are not articulated with one another. As a result they give rise to a reporting which is deemed as of little interest by the health personnel. The latter advocate a humanist culture which is little compatible with the managerial logic of the management and the overseeing authorities. This piling up of disconnected indicators is in the end harmful for the evaluation (Elbaum, 2009).

In this context, this paper has tried to propose a structure of organizational control avoiding this piling-up and help strategic, organizational and operational decision-making. The central hypothesis is that a systemic vision of the organization is necessary in order to develop a single control system able to articulate and make the different types of evaluation inter-act. The model proposed is a system of shared control based on three inter-dependent dimensions centred on efficiency, effectiveness and ethics. The tool facilitating the operability of control system, called 3E, is a Shared Scorecard, in which all the personnel are involved. It aims at breaking away from the bureaucratic practices of the 20th century, which are no longer adapted to a VUCA environment. This sharing of information offers more relevance and speed in decision-making in such an environment. This concept of interactive control remains to this day little explored in the academic world and in organizations (Marginson, 2002, Berland and Persiaux, 2008). That is the reason why it deserves to be tested inside an establishment to appreciate its relevance and bring the adequate adjustments.

References

Abernethy, A.M., Chua, W.F., Grafton, J., Mahama, H. (2007). Accounting and control in health care: behavioural, sociological and critical perspectives. In *Handbooks of Management Accounting Research* (Eds, Chapman, C. S., Hopwood, A. G., Shields, M. D.). Elsevier, (2), 805-829.

ANESM, (2015). *Avis du conseil scientifique du 12 mars 2015 - Elaboration et utilisation des indicateurs dans la démarche d'évaluation interne,* http://www.anesm.sante.gouv.fr/IMG/Avis%20du%20CS%20du%2012%2003%202015_Note%20indicateurs.pdf

Argyris, C. (2003). *Savoir pour agir*. Paris: Dunod.

Argyris, C., Putnam, R., McLain Smith, D. (1985). *Action Science. Concepts, Methods and Skills for Research and Intervention.* US: Jossey-Bass Inc., Publishers.

Bandura A. (1976), *Social Learning Theory*. US: Pearson.

Berland, N., Chiapello, E. (2004). Le rôle des réformateurs sociaux dans la diffusion de nouvelles pratiques de gestion. *Comptabilité- Contrôle – Audit* 3 (10): 133-160.

Berland, N., Persiaux, F. (2008). Le contrôle des projets d'innovation de haute technologie. *Comptabilité - Contrôle - Audit* 14 (2): 75-106.

Bertezene, S. (2018). Control of hospitals and nursing homes in France: The 2016 reform may indirectly improve a dysfunctional system, Health Policy, Vol. 122, Issue 4, 228-334.

Bisbe, J., Batista-Foguet, J.M., Chenhall, R. (2007). Defining management accounting constructs: a methodological note on the risks of conceptual misspecification. *Accounting, Organizations and Society* 32(7/8): 789-820.

Boston Consulting Group, (2012). https://www.bcgperspectives.com/content/interactive/strategic_planning_landscape_of_turbulence

Brown, J. S., Duguid, P. (1998). Organizing learning and communities-of-practice: toward a unified view of working, learning and innovation. *Organization Science* 2(1): 40-57.

Castells, M. (1996). *The rise of the network society, the information age: economy, society and culture*, Vol.I. Cambridge, MA; Oxford, UK: Blackwell.

Choffel, D., Meyssonnier, F. (2005). Dix ans de débats autour du Balanced Scorecard. *Comptabilité - Contrôle - Audit* 2 (11): 61-81.

Chow, C. W. (1998). The balanced scorecard: a potent tool for energizing and focusing healthcare organization management. *Journal of Healthcare Management* 43(3): 263-280.

Cours des Comptes, (2012). *Rapport sécurité sociale – Chapitre 8, La certification des établissements de santé par la Haute Autorité en Santé*, 373-395.

Dambrin, C., Löning, H. (2008). Systèmes de contrôle interactifs et théories de l'apprentissage : une relecture des travaux de R. Simons à l'aune des théories piagétiennes. *Comptabilité - Contrôle - Audit* 3 (14):113-140.

Elbaum, M. (2009). Les indicateurs de performance en matière de politiques sociales : quel sens pour l'action publique ? *Revue de l'OFCE*, 111 (4).

Ford, H. (1929). *My philosophy of Industry*. New York: Coward McCann.

Forgione, D. A. (1997). Health care financial and quality measures: international call for a balanced scorecard approach. *Journal of Health Care Finance* 24 (1): 55-58.

Georgescu, I., Naro, G. (2012). Pressions budgétaires à l'hôpital : une étude qualitative du concept de « RAPM » auprès de praticiens hospitaliers, *Comptabilité – Contrôle - Audit* 3, (18): 67-95.

Giard, V. (1996). Structure et coordination des systèmes productifs, Coopération et conception. In *Coopération et conception* (Eds, de Terssac, G., Friedberg, E.). Paris: Octares.

von Glasersfeld E. (2004). Pourquoi le constructivisme doit-il être radical ? in *Constructivisme Choix contemporains, Hommage à Ernst von Glasersfel* (Eds, Jonnairt P., Masciotra D.). Québec: Presses de l'Université de Québec.

Habermas, J. (1992). *De l'éthique de la discussion*. Paris: Editions du Cerf.

HAS (2012), *Perception de la certification des établissements de santé par les professionnels de santé et les représentants des usagers*. http://www.has-sante.fr/portail/upload/docs/application/pdf/2013-10/barometre_perception_certification.pdf

Hébert, L. (2009). Rebondir face à la crise : construire une entreprise vigilante, résiliente et agile. *Gestion* 3 (34): 20-22.

Isaacson, W. (2011). *Steve Jobs*. Paris: Jean-Claude Lattès.

Johansen, B. (2007). *Get There Early: Sensing the Future to Compete in the Present*. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Kaplan, S., Norton, D. (1996). *The Balanced Scorecard: Translating Strategy Into Action*. Harvard Business School Press.

Kaplan, S., Norton, D. (2006). How to implement a new strategy without disrupting your organization. *Harvard Business Review* 3 (84).

Le Moigne, J.L. (2007). *Les Épistémologies Constructivistes*. 3ème édition, Que sais-je ?, Paris: PUF.

Levitt, B., March, J. (1988). Organizational learning. *Annual Review of Sociology.* 14: 319-40.

Lorino, P. (2003). *Méthodes et pratiques de la performance*. Paris: éditions d'Organisation.

Malmi, T., Brown, D.A., (2008). Management control system as package - Opportunities, challenges and research directions. *Management Accounting Research* 19 (4): 287-300.

Marginson, D.E. (2002). Management control systems and their effects on strategy formation at middle management levels : Evidence from a U.K. organization. *Strategic Management Journal* 23 (11): 1019-1031.

McCann, J. (2009). Resilience, turbulence and agility. *HRPS People & Strategy* 32 (3): 45-51.

Merchant, K., Van der Stede,W.A. (2007). *Management Control Systems*. 2nde édition, Harlow, Essex, England: Prentice Hall, Pearson Education Limited.

Mintzberg (2002). *Le management – Voyage au centre des organisations*. Paris: Editions d'Organisation.

Molinié, E. (2005). *L'hôpital public en France : bilan et perspectives*. Paris: Avis et rapports du Conseil économique et social.

Montalan, M.A., Vincent, B. (2011). Élaboration d'un balanced scorecard en milieu hospitalier. *Revue française de gestion* 211 (2): 93-102.

Morin, E. (1985). *La méthode 2. La Vie de la Vie*, Paris : Seuil.

Morin, E. (1986). *La méthode 3. La connaissance de la connaissance*. Paris: Seuil

Morin E. (1990). *Science avec conscience*. Paris, Seuil.

Morin, E. (1999). L'épistémologie de la complexité. In *L'intelligence de la complexité* (Eds, Le Moigne, J.L., Morin, E.). Paris: L'Harmattan.

Morin, E. (2004). *La méthode 6. L'éthique*. Paris: Seuil.

Morin, E. (2005). *Introduction à la pensée complexe*. Paris: Seuil.

Morin, E., Le Moigne J.-L. (1999). *L'intelligence de la complexité.* Paris: L'Harmattan.

Naro, G. (2005). Responsabilité sociale de l'entreprise et pilotage des performances, in *La responsabilité sociale de l'entreprise* (Eds, Le Roy, F., Marchesnay, M.) Éditions EMS.

Naro, G., Travaillé, D. (2010). Construire les stratégies avec le Balanced Scorecard : vers une approche interactive du modèle de Kaplan et Norton. *Finance Contrôle Stratégie* 13 (2): 33-66.

Nobre, T., Haouet, I. (2011). Le cas d'un balanced scorecard en contexte hospitalier. *Revue française de gestion* 211 (2, n°2): 103-118.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science* 1 (5): 14-37.

Nonaka, I., Konno, N. (1998). The concept of `ba': building a foundation for knowledge création. *California Management Review* 40 (3): 40-54.

Nonaka I., Zhu Z. (2012), *Pragmatic Strategy: Easter Wisdom, Global Success*. Cambridge: University Press.

Ouchi, W. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science* 25 (9): 833-848.

Prax, J.Y. (2012). *Le Manuel du Knowledge Management*. Paris: Dunod (3ème édition).

Renaud, A. (2013). Les configurations de contrôle interactif dans le domaine environnemental. *Comptabilité - Contrôle - Audit* 2 (19): 101-132.

Robelet, M., Piovisan, D., Claveranne, J.P., Jaubert, G. (2009). Secteur du handicap : les métamorphoses d'une gestion associative. *Entreprises et Histoire*, 56 (3): 85-97.

Saulpic, O., Ponssard, J.P. (2000). Une reformulation de l'approche dite du Balanced Scorecard. *Comptabilité – Contrôle – Audit* 6 (1): 7-25.

Schaetzel, F., Tregoat, J.J. (2013). *Articulation de la fonction inspection contrôle des ARS avec les autres fonctions concourant à l'amélioration de la qualité au sein des établissements sanitaires et médicosociaux (certification, évaluation, contractualisation),* IGAS, RAPPORT N°RM2013-010P.

Schwaber K., Beedle M. (2001). *Agile Software Development With Scrum*. Pearson.

Simon, H.A. (1969). *The Science of the Artificial*. 3ème édition, Cambridge, MA: MIT Press.

Simons, R. (1991). Strategic orientation and top management attention to control system. *Strategic Management Journal* 1 (12): 49-62.

Simons, R. (1995). *Levers of Control : How Managers Use Innovative Control Systems to Drive Strategic Renewal*. Boston: Harvard Business School Press.

Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, Winter special issue (17): 45-62.

Taleb, N.N. (2010), *The Black Swan: The Impact of the Highly Improbable*. New York: Random House.

Travaillé, D., Marsal, C. (2007). Automatisation des tableaux de bord et cohérence du contrôle de gestion : à propos de deux cas. *Comptabilité - Contrôle - Audit* 2 (13): 75-96.

Tsoukas, H. (1996). The Firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, Winter special issue (17): 11-25.

Vaivio, J. (2004). Mobilizing local knowledge with « provocative » non-financial measures. *European Accounting Review* 13 (1): 39-71.

Weber, M. (1995). *Economie et société. Les catégories de la sociologie*. Paris: Plon, tome I.

Weick, K.E. (1993). The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster. *Administrative Science Quarterly* (38): 628- 652.