

THE PROCESS APPROACH: ORGANIZATIONAL TOOL

Received: 11/11/2022

Accepted: 25/12/2022

AZOUAOU Nassima * : ISTA, Université Saad DAHLAB, BLIDA 1, Algérie.
E-mail : azouaou.nass@gmail.com

Abstract

The objective of this paper is to explain the approach mobilized to include an organization in a process of continuous improvement. In order to achieve this, we have chosen to review the literature in relation to our object of study. This allows us to identify, formalize and measure the degree of process control in order to improve their functioning and this with a view to implementing a process optimization methodology.

The results revealed that the process approach is an organizational tool. For its implementation, the organization can mobilize several methods. No formal method or ready-to-use model in all situations exists to improve the organization's processes in order to increase its performance and remain competitive.

Keywords : mapping, optimization, organization, performance, process.

Jel Classification Codes : D29, L25

* Author correspondent.

Résumé

L'objectif de ce papier est d'explicitier l'approche mobilisée pour inscrire une organisation dans une démarche d'amélioration continue. Pour ce faire, nous avons choisi de passer en revue, la littérature en relation avec notre objet d'étude. Ce qui nous permet d'identifier, de formaliser et de mesurer le degré de maîtrise des processus en vue d'améliorer leurs fonctionnements et ceci dans une perspective de mise en œuvre d'une méthodologie d'optimisation des processus.

Les résultats ont révélé que l'approche par processus est un outil organisationnel. Pour sa mise en œuvre, l'organisation peut mobiliser plusieurs méthodes. Il n'existe aucune méthode formelle ou modèle prêt à l'emploi dans toutes les situations pour améliorer les processus de l'organisation en vue d'augmenter sa performance et de rester compétitive.

Mots Clés : cartographie, optimisation, organisation, performance, processus.

Jel Classification Codes : D29, L25

Introduction

In the age of globalization, the establishment of a new organization within enterprises is justified when the search for efficiency is a response to the competition which is spreading in the various sectors of the industry. In addition, it is a way for the company to manage changes in its environment. Therefore, to ensure its sustainability, the company must be competitive, flexible and eager to improve its performance.

Thus, the customer-oriented process approach is considered as *« a way to steer an organization at all levels and to guide all stakeholders on the results of their activities in relation to the expectations of their clients »* (AFNOR 2005). In addition, it is a *« management tool »* that allows, according to (Brandenburg and Wojtyna 2003), to model the company in order to control the quality of its products and ensure the satisfaction of its customers. Process organizing has the characteristic of being transversal. It makes it possible to improve relations between the different structures of the enterprise and their decompartmentalization.

However, a process combines flow, a produced added value, resources, key success factors, knowledge, skills and procedures. It is characterized by the pilot, the required resources, the input elements, the output elements, the associated measurement, monitoring or control system. From this perspective, our work aims to clarify the **process approach**, which allows the company to be involved in a continuous improvement process. Beyond its topicality, our research topic covers several areas linked to many dimensions of management sciences. In addition, and considering the short-term challenges that our companies must face in order to handle the harsh competition and to prepare for the opening of borders and removal of tariff barriers between Algeria and various

free-trade zones, we considered fundamental to direct our field of investigation on the following issue:

How to improve the organization of the company in order to include it in a process of continuous improvement ?

In order to answer our questions, we reviewed the literature related to our object of

Study :

- Basic concepts linked to the process approach ;
- The contribution of management sciences in this area ;
- Process optimization.

2. Basic concepts linked to the process approach

2.1 Organisation, between myths and reality

Nowadays, regardless of the type of job occupied (manager, consultant, etc.), it is necessary to have a wide range of knowledge in order to be the most productive. Organizational analysis is multidisciplinary. It has its roots in the various disciplines of the human and social sciences. It aims to understand the functioning of organizations, using multiple perspectives to learn how to act and intervene on them. It is not the purpose of this article to expose the different evolutions of the concept of organization, nor to debate its multiple meanings according to a panoply of approaches (sociological, economic...), but rather to catalogue it for the needs of our study.

The definition and functioning of organizations have not ceased to evolve. Giants, theoreticians and practitioners (Taylor, Fayol, Mintzberg, Crozier, Bernoux, etc.) have forever impacted organizational thinking. It seems rather difficult to try to give practical meaning to the concept of organization without at least

mentioning some founding approaches of this thought (the movement of human relations, the approach by contingency, the actionist theory of organizations, etc.). At first, each specialist in the theory of organizations started by thinking of the organization as an entity. However, over time, the movement revolving around the different theories of organization has changed: organization started to be analysed and considered by some researchers as a culture, a flow, a tool of domination...

At the heart of the definition of (Morin 1977) is an organizational concept that uses several criteria to clarify the notion of organization. It considers the concept to be « *the arrangement of relationships between components or individuals which produce a complex unit or system, endowed with unknown qualities at the level of the components or individuals. Organisation interrelationally binds various elements or events or individuals which then become the components of a whole. It ensures solidarity and solidity linked to these connections, therefore ensures to the system, a certain possibility of duration in spite of random disturbances. The organization consequently, transforms, produces, sustains* ».

Ultimately, organisations need to perform specific tasks and achieve specific results, but they also need to stimulate their teams to form their own joint projects and cooperate with them to achieve those results (Desreumaux 2015).

2.2 The company's systemic vision

The concept of a system developed in the United States during the 1940s as a response to the limits of the classical explanation that attempts to « *explain reality by breaking it down and looking for the simple elements that make it up.* » (Aromatario 2004). In other words, reality is independent of the observer and his environment. On the contrary, the system concept presents a

description of reality and gives rise to new ways of defining reality in order to solve the complexity of the sets with which we must work (Lapointe 1993).

(Rosany 1975) specifies that a *system* is « *a set of dynamically interacting elements, organized around a goal* ». The latter, whether complex or simple,—has common characteristics to be known (Brandenburg and Wojtyna 2003).

2.2.1 The frontiers

The lines are what separate the interior from the exterior and it is according to the purpose[†] of the analysis that the observer determines where the system begins and stops.

In addition, there are several levels of analysis, which is defined as a system in which one level of analysis can be considered as a subsystem or environment in another level of analysis, as illustrated in Table N°1.

Table 1. Levels of Analysis

	Purpose of the analysis = SYSTEM	What apart = ENVIRONMENT	What's in it = SUBSYSTEMS
Level 1 Company analysis	The company	The market, the competition	The factory, administrative services, sales agencies
Level 2 Factory analysis	The factory	The company	The workshops

[†] Mélése J. (1991) indicates that « *the aims of a system express its purpose, its vocation in economic, ethical and sociological terms. They reflect the idea that a human group has the tasks of a system, in that they are not directly operational*».

Level 3 Factory analysis	The workshop	The factory	Workstations
Level 4 Factory analysis	The workstation	The workshop	The tools and the operator

Source: (Brandenburg H. and, Wojtyna J. 2003)., L'approche Processus, Mode d'Emploi, Editions organisation, page 23.

2.2.2 The exchanges with its environment

These are the differences in state observed at the level of the borders between entries (originating in the environment) and exits (action of the system on its environment).

2.2.3 The interior

It is a set of interrelated elements that make up the interacting subsystems.

2.2.4 The stability

The functioning of the system is based on the existence of feedback loops that are (Brandenburg and Wojtyna 2003) *«an adaptive mechanism that ensures constant outputs even if the inputs or environment fluctuate »*.

However, *«Systematics bring together theoretical, methodological and practical approaches to the study of what is recognized as too complex to be tackled in a reductionist way and which poses problems of borders, internal and external relations, structure, law, or emerging properties characterizing the system as such, or problems with how a complex totality is observed, represented, modelled or simulated »*. (Donnadieu, Durand and al. 2003)

The systemic vision is dynamic. It examines the object to be studied in its entirety and complexity. It is interested in the

relationships and interactions that exist between the various elements that compose her. « *A phenomenon remains incomprehensible until the field of observation is sufficiently broad to include the context in which the phenomenon occurs*». (Watzlawick, Beavin and al. 1967). In addition, a company is a complex system because it brings together machines, premises, personnel, culture, history, etc. Moreover, it is in constant relation with its environment (political, economic, ecological, technological, sociological and legal) which constantly changes and forces the company to always adapt to the disruptions caused by its internal and/or external environment, thus in order to concretize its purpose, the creation of added value, and ensure its sustainability.

Ultimately, the company is composed of interconnected subsystems, with purposes, that work for the achievement of the global purpose whose performance is necessary to measure. It is crucial to identify subsystems and interrelations, as well as measure performance. In conclusion, we can specify that the systemic approach is «*an organized set of processes linked by a set of interactions*» (Lapierre 1992). It is therefore «*a new way of seeing the reality of the world, striving to take into account its previously ignored characteristics such as instability, openness, fluctuation, chaos, disorder, blurring, creativity, contradiction, ambiguity, paradox, that are the prerogative of complexity*». (Donnadieu and Karsky 2002). We will now detail the content of the process approach, which was inspired by the systemic vision and has adopted a number of concepts and methods for its theoretical underpinning.

3. The Process Approach: the contribution of Management Sciences

3.1 Definition and typology of processes

The company is a complex system that cannot be understood in its entirety. It cannot be studied or mastered only through the knowledge of its subsystems (processes). Moreover, *« the most recent concepts in management and organising companies refer to systemic approaches »*. (Cattan 2008). Its subsystems cannot be isolated from each other and must be identified, understood and controlled. The process is *« a Latin word for the time course of a phenomenon »* (Silem, Albertini and al. 2012). According to the French standard *« a process is a system of activities that uses resources to transform incoming elements into outgoing elements »* (AFNOR 2005). In addition, *« a process is a set of activities combining a variety of resources, capacities and skills, producing an “output” with value to an internal or external client »* (Davenport and Short 1990). Another definition illustrates the concept of a process as *« simply a set of activities that together produce a result of value to a client »* (Hammer and Champy 1993).

On the basis of the above, a company is considered to be a process because it has a purpose that is expressed in terms of results to be achieved in relation to customers. It is represented by output data, resources, activities and skills; a window to the outside through input data and added value. It should be noted that a company is composed of several processes, the typology of which is as follows:

3.1.1 Les processus de réalisation ou métier

«They contribute directly to the achievement of the product, from the detection of the customer's need to its satisfaction. They bring together activities related to the product's life cycle» (Cattan 2008). We identify them as operational processes, business processes, those that add value in relation to the customer's needs. The triggers for these processes are outside the company, and when the customer comes in, they go through the company, they come out of the it to deliver a product, a service, a value to the customer, which is what we call customer-oriented processes. These processes reflect the overall performance of the company. In order for them to ensure their performance levels, they will require the following processes:

3.1.2 Supportive processes or support

« They are necessary for the functioning of all processes by providing them with the required resources. These include: human resources, financial resources, facilities and maintenance (premises, equipment, hardware, software, etc.), information processing, etc.» (Cattan 2008). They are internal processes of the company, and are at the service of customer-oriented processes. They provide resources, support and advice to achieve the desired level of performance. They do not create perceptible added value for the customer.

3.1.3 Direction, Pilot or Management Processes

« They include the determination of the policy and the deployment of objectives in the organization. They ensure the coherence of the implementation and support processes. They include the measurement and monitoring of the process system and the exploitation of results for improved performance» (Cattan

2008). These are the two types of processes mentioned above, as well as the external environment that feed information to the steering processes, information which will be transformed into policies and objectives that will be developed at the level of all the processes, so that globally, the company achieves its performance level and strategic objectives.

3.2 Characteristics and interests of the process approach

This approach has disrupted working methods and organizations. It makes it possible to identify an organisation in a very specific way in order to detect, reduce malfunctions and improve performance. *«This approach is not only used to obtain or maintain a certification, but is an excellent management tool for any company, regardless of its size, field of activity and level of maturity»* (Dagoreau and Saily 2010). Indeed, a process-based approach leads the company to organize itself around activities that cross its various functions, with the aim of providing a product or service. Therefore, it is an approach that leads to a transversal organization which allows the control of interfaces.

«The process approach is a systemic approach, which of one of the characteristics is the existence of several levels of analysis» (Brandenburg and Wojtyna 2003). In other words, it's a multi-level analysis depending on the purpose. It is a modelling tool (Ramirez 2009), a lever at the service of strategy (Lorino and Tarondeau 2015), that permits to take into account all the necessary activities allowing the improvement of the performance of the company. It is a client-oriented approach and it is part of a client-supplier logic. It *« must remain simple and accessible to all so that it can be applied as widely as possible »* (Cattan 2008). On the other hand (Raquin and Morley-Pegge 2009), the advantages are divided in favour of two parties: namely the company and its different protagonists. It should be noted that the most important benefits are:

3.2.1 For the company

Knowledge and control of the cost of products and/or services; reduction of the operating costs of processes; increase of activity and revenue; improvement and optimization of processes; control of risks; and matching resources to objectives.

3.2.2 For business stakeholders

Involvement of all the protagonists of a same process ; development of a culture of mutual aid; provision of tools adapted to the operational protagonists and sustainability of knowledge.

3.3 Process Approach Implementation Methods

There are several methods for process-based management implementation within the organization. We will describe the most quoted and used in the various research related to the implementation of the process approach. According to (Cattan 2008), « *whatever the chosen approach, there are, in one form or another, five phases that essentially meet the requirements of the ISO 9001 standard, in its 2000 version* » :

- *The identification of the organization's processes; The description and representation of each of the processes; The implementation of the processes and the establishment of a process steering system;*

- *The definition of procedures for continuous improvement of processes;*

The preference for simple methods applicable by the greatest number as highly sophisticated methods require the intervention of specialists in order to be applied. Complex methods generally remain an enigma for potential users. Simple methods facilitate and encourage group work, thus involving staff ».

3.3.1 The first method

This is a technique evoked by (Mougin 2004) that promotes customer orientation throughout the organization's processes. It is structured around three stages:

1. Mapping processes: identifying processes and defining interfaces;
2. Controlling the functioning of each process in the organization;
3. Implementing actions of continuous progress (process optimization) and improvement of all the products using a set of key elements.

3.3.2 The second method

This method is based on « *a concrete, practical and action-oriented approach, it offers three stages of "knowledge", which are prerequisites and indispensable for effective action* » (Raquin and Morley-Pegge 2009). This involves identifying the processes by naming them; assigning the processes in charge; and describing the processes. The method also proposes four other «action» steps for all contributors under the coordination of the process pilot. It is about engaging in a participatory approach; defining relevant indicators; analysing processes periodically; and developing as well as implementing action plans.

3.3.3 The third method

According to (Lorino 2003), this approach «follows a methodology clearly formulated upstream of the process and which is divided into eight steps. They are linked as follows: the formulation of strategic objectives (what is the target?), the analysis of the company's processes, the analysis of the activities affected (mapping of processes allowing a detailed view of the concrete content of processes: tasks and operating procedures), etc. » (Pallas and Batac 2006).

3.4. The Process approach and quality

The process approach is addressed by several reference systems such as: the International Organization for Standardization (ISO), the Common Assessment Framework (CAF), the European Foundation For Quality Management (EFQM) and the Prix France Qualité Performance (PFQP). They all promote management through quality, which consists in «*organizing oneself by applying the principles and tools of quality*» (Mougin 2004). The following table gives an overview of some reference systems dealing with processes.

Table 2. The process approach in various quality standards

The reference system	Designation of the reference system	Content
ISO 9001 :2015	Quality management system	ISO 9001:2015 strongly encourages the adoption of a process approach that integrates all business processes into the quality management system (QMS). This approach ensures that quality management functions are performed and managed appropriately, thereby improving the efficiency of the entire organization.
FD X 50-176 :2005	Process management	This booklet introduces the fundamental principles of the process approach.
ACX 50-178 : 2002	<i>Process management, good practices and feedback</i>	This agreement takes the form of good practices and recommendations complementary to FD X 50-176 standard. It does not model a method or set any pre-established rules or requirements.

EFQM	The model of excellence	This model aims for sustainable excellence, it uses a common language to satisfy customers and stakeholders. This reference system totals a thousand points of which 140 points or 14% are allocated to the process approach, hence the importance of processes in the creation of value (Cattan 2008)
CAF	Public Service Self-Assessment Framework	This model uses the same principles as EFQM, it promotes the introduction of self-assessment and quality management in the public sector. It stipulates the need to continuously identify, design, manage and improve processes.
Malcom Baldrige		This model judges a company on 28 criteria classified in 7 categories. It considers processes as a key element in achieving the objectives set (Cattan 2008).

Source : created by the author, inspired by the file “the processes” available on the site www.qualinove.fr,

4. The process optimisation

The maintenance of the competitive advantage depends on the improvement actions undertaken at the level of the various processes of the enterprise and *«among the expected results by the management of the organisation, we can quote in particular its contribution to the continuous improvement of processes and thus to the continuous improvement of the overall performance of the organisation»* (AFNOR 2005).

In order to carry out a process analysis and improvement process, the following steps must be followed (Cattan 2008):

- Prioritizing processes, in order to select the process(s) that are not working;
- Process analysis: identifying process malfunctions, then making suggestions for improvement;
- Opting for one of the above proposals, knowing that the implementation of this choice requires the identification of the necessary resources.

At present, there are no formal methods or ready-made models in all situations to improve a company's processes in order to increase its performance and remain competitive. However, there are ways of doing things and general principles to rethink the basic processes of a company and reorganize the resources around them. This is what optimisation introduces.

Process optimization is synonymous with the establishment of a culture of continuous improvement, and its objectives are to: (1) better take into account the expectations of beneficiaries in order to improve the services provided; (2) promote the involvement of the various actors concerned in the operation of the process; (3) clarify roles and responsibilities, define the necessary room for manoeuvre and consistency, simplify interfaces between entities; (4) transform or create new processes to meet new expectations; (5) reduce costs, deadlines or increase performance against defined indicators; (6) better respond to unforeseen events in a timely manner by implementing a quality system; (7) improve operational efficiency, productivity and responsiveness of the organization with the installation of a management package[‡].

[‡] «Optimising processes», available on
http://www.cdumortier.fr/norme/optimiser_processus.pdf

In addition, the main means of optimisation are the pooling of resources, the outsourcing of tasks with low added value and the improvement of performance. Moreover, process management is a great way to successfully optimize processes. To achieve this, it is necessary to take into account several key factors such as management involvement, training of managers and resource allocation. In addition to that, it is needed to put in place a new dashboard that tracks the effectiveness of the new system. The manuals and the various works consulted describe several possible methods for the optimization of processes, thus we were able to highlight a multi-step sequential method[§]. Depending on the context, strategy and priorities of the organization, different intensities can be put in the execution of these steps:

- 1. Mapping the processes** in order to identify the intervention perimeters, as they may be subject to change, which requires a new redefinition of the perimeters and consequently updating the cartography.
- 2. Selecting key processes** when optimization does not apply to all business processes. Therefore, we must identify the processes concerned by optimization based on a diagnosis that illustrates a number of failures such as: finding of malfunction, dissatisfaction of beneficiaries or emergence of new expectations, evolution of the service strategy that places certain processes before others...
- 3. Characterizing the process(s)** by defining the purposes of the processes concerned, the pilots, the customers, the suppliers, the indicators that allow to measure the performance of the process, the input elements of the processes...

[§] See previous footnote

4. **Describing processes** with a focus on describing the entire process, activities and their owners.
5. **Defining the optimization objectives** is only mentioned now, as the elements described above had to be defined beforehand in order to target coherent objectives based on a detailed diagnosis of the processes.
6. **Choosing the degree of optimization:** improve or redesign, depending on the objectives and results of the performance indicators. This is the methodological approach that needs to be taken, in other words, once the scope of the objectives is defined, it is necessary to define the way to optimize the processes by choosing either to:

6.1 Simple actions of improvement: which consists in acting on the existing process more precisely on some of its factors.

6.2 The radical method : reengineering or total reconfiguration of processes. It is defined as «*a fundamental challenge and radical redefinition of business processes to achieve dramatic gains in the critical performance of today's costs, quality, service and speed*» (Hammer and Champy 1993). Moreover, it is a break with the existing system in order to rebuild the company and improve its performance.

To this end, «*reengineering is a tool to make the company more competitive and more efficient with the definition of what the company should do and how it should do it, by eliminating processes that do not ensure customer satisfaction*» (Gagnon 2000). Table 3 highlights some symptoms of potential processes that require reconfiguration depending on the diseases caused.

Table 3: common symptoms and diseases of the processes to be reconfigured

Symptoms	Diseases
Intensive flow of information, redundant data and double entries.	Fragmented natural process.
Buffer stocks, accumulations of assets. A significant number of safety margins are created on all tasks in the process.	The system breaks down, compensating the uncertainty.
High percentage of audits and controls compared to low added value created.	Fragmentation.
Repeats and iterations. It is necessary to redo the work several times in a row before obtaining the expected result.	Poor feedback flow.
Complexity, exception and special cases. Over time, simple processes become complex.	Sedimentation from a single base.

Source: (Briol 2008)., Ingénierie des Processus Métiers, de l'élaboration à l'exploitation, Lulu Books, page 95.

- 7. Formalising the optimised processes:** the aim is to take into account the new configurations of the processes subject to the optimisation followed by the determination of the new indicators.
- 8. Implementing the new processes and measure the impact:** provide a new action plan to take ownership of the optimization actions. The measurement of the new indicators results will determine the effectiveness of the actions undertaken.
- 9. Generating and improving:** at this stage it is essential to intervene at the right time to ensure a continuous steering of the processes.

Diagram illustrating the PDCA cycle (Plan, Do, Check, Act) in French:

- Planifier (Plan):** Stages from 1 to 6. Etapes de 1 à 6.
- Faire (Do):** Stage 7. Etape 7.
- Contrôler (Check):** Stage 8. Etape 8.
- Améliorer (Act):** Stage 9. Etape 9.

179

participate in the economic system. The process approach identifies the interactions that are essential to an organisation's competitiveness.

6. Références

1. AFNOR (2005), La norme FD X 50-176 : Management des processus.
2. Aromatario C. (2004), « Le système et l'approche dite systémique », available on: <https://cadredesante.com/spip/IMG/pdf/doc-168.pdf>
3. Brandenburg H., Wojtyna J. (2003), « L'approche processus, mode d'emploi », Éditions d'Organisation. Paris, France E-Business–Applications and Global Acceptance, 96.
4. Briol P. (2008), « Ingénierie des processus métiers : de l'élaboration à l'exploitation », éditeur : Lulu Books.
5. Cattan M. (2008), « Guide des processus, passons à la pratique ! », Afnor, 2ème édition.
6. Dagoreau, O., & Saily, A. (2010), « L'approche processus en pratique », available on: https://www.exaris.fr/upimg/mail/238_-lapproche-processus-en-pratique-avr-2010_1.pdf
7. Davenport T.H., Short J.E. (1990), « The New Industrial Engineering Information Technology and Business Process Redesign », Sloan Management Review, Summer, P. 11-27.

8. Desreumaux, A. (2015), « Nouvelles formes d'organisation et évolution de l'entreprise. » *Revue française de gestion* 253(8): 139-172.
9. Donnadieu, G., Durand, D., Neel, D., Nunez, E., & Saint-Paul, L. (2003). « L'Approche systémique : de quoi s'agit-il ? », Synthèse des travaux du Groupe AFSCET « Diffusion de la pensée systémique », available on: <http://www.afscet.asso.fr/SystemicApproach.pdf>.
10. Fascicule « Optimiser les processus », available on : http://www.cdumortier.fr/norme/optimiser_processus.pdf.
11. Gagnon, J. (2000), « La réingénierie des relations de sous-traitance dans le secteur de l'automobile ». Université du Québec à Trois-Rivières, available on: <https://depote.uqtr.ca/id/eprint/3158>
12. Hammer M.et Champy J. (1993), « Reengineering, Réinventer l'entreprise pour une amélioration spectaculaire de ses performances », Traduit de l'américain par Michel Le Seac'h, Dunod, Paris 1993, Edition originale Harper Colling Publishers, INC, New York, Rengineering the corporation/ A manifest for Business Revolution .
13. Lapierre, J.-W. (1992), « L'Analyse des systèmes : l'application aux sciences sociales », Syros Editions.
14. Lapointe, J. (1993), « L'approche systémique et la technologie de l'éducation », available on : [http://bazar.perso.free.fr/Files/Other/DOCUMENTATION/Div
ers/Approche%20systemique%20de%20la%20technologie%20
de%20l%20education.pdf](http://bazar.perso.free.fr/Files/Other/DOCUMENTATION/Div ers/Approche%20systemique%20de%20la%20technologie%20de%20l%20education.pdf)

15. Lorino, P. (2003), « Méthodes et pratiques de la performance : le pilotage par les processus et les compétences », Ed. d'organisation.
16. Lorino, P., & Tarondeau, J.-C. (2006), « De la stratégie aux processus stratégiques ». *Revue française de gestion*, 160(1), 307-328. doi: 10.3166/rfg.160.307-328, available on: <https://www.cairn.info/revue-francaise-de-gestion-2006-1-page-307.htm>
17. MELESE, J. P. (1991), « L'analyse modulaire des systèmes (AMS) », Les éditions d'organisation.
18. Mevel, O., & Abgrall, P. (2009), « Management de l'information dans l'organisation : une approche nouvelle de la veille informationnelle fondée sur le captage et le traitement des signaux faibles », *Revue internationale d'intelligence économique*, Vol 1(1), 123-137.
19. Morin, E. (1977), « La Méthode, la nature de la nature », Éditions du Seuil collection Points, p.103-104, cité par Mbida R.R. (2009).
20. Mougin, Y. (2004), « La cartographie des processus : Maîtriser les interfaces », Editions Eyrolles.
21. Pallas V., Batac J. (2011), « La gestion par les processus dans la banque : de l'intention à la mise en œuvre ».
22. Ramirez, N. G. (2009), « Contribution à l'amélioration des processus à travers la mesure de la maturité de projet : application à l'automobile », Ecole Centrale Paris. available on : <https://tel.archives-ouvertes.fr/tel-00491760>

23. Raquin, M., Morley-Pegge, H. (2009), « Piloter par les processus », Maxima, Paris.
24. Rosnay J. (1975), « Le macroscopie vers une vision globale », Paris, Éditions le seuil, cité par Clivillé V.(2004), « Approche systémique et méthode multicritère pour la définition d'un système d'indicateurs de performance », Thèse de doctorat en Génie industriel, Université de Savoie, available on: https://projects.listic.univ-smb.fr/theses/these_Cliville.pdf .
25. Silem, A., Albertini, J.-M. (2012), « Lexique d'économie », Editions Dalloz.
26. Watzlawick, P., Beavin, J. H., Jackson, D. D., & Morche, J. (1972), « Une logique de la communication », available on : <http://inventin.lautre.net/livres/une-logique-de-la-communication.pdf>