

Economic Intelligence Meeting Quality Prospects in France with Particular Focus on Healthcare Issues

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Abstract: In France, the Economic (EI) or Competitive Intelligence (CI) has gradually emerged as an important tool for strategic decision for companies. Developed in an industrial economy, it has progressively integrated the dimensions of services' economy, and so the digital dimension, that of social networks and the prospect of development of territories (Territorial Intelligence). Through situations and processes of Information and Communication, EI also meets Quality approaches, particularly in a view of innovation, or that of qualitative evaluation as continuous improvement. We propose reflections about this evolution, defining new ways for a revisited "Organizational Intelligence" as Strategic Information for Performance for a Learning Organization, with an important territorial dimension, particularly in Healthcare Issues with the use of ICT tools and the experimental role of interface's organizations.

Key words: economic intelligence; quality; France; healthcare; processes; territories; learning organization; interfaces

JEL codes: O, I, Y

1. Introduction

In France, the Economic (EI) or Competitive Intelligence (CI) has gradually emerged as an important tool for strategic decision in business with some delay regarding other countries. Developed in an industrial economy, it has progressively integrated the dimensions of services' economy, as well as the digital dimension and that of social networks. We tackle EI challenges in a perspective also including sustainable development of territories or Territorial Intelligence.

The changes have been particularly important in the last 30 years. As highlighted by G. Gramaccia (2008), three emblematic innovations have become symbolic of the managerial efficiency and have profoundly changed the way of thinking and practices of cooperation in organizations: the Total Quality Management (importance of performance), Project Management and Knowledge Management (and therefore the role of Information, including Economic Intelligence) with the digital connection aspects of "cognitive capitalism" in the context of a "Network Society" (Castells), with the growing importance of the services and intangible economy (Moulier- Boutang). We can add the issue of skills management (including information and communication competencies).

D. Wolton (2014) emphasized the effects of fashion and vocabulary changes ("obsessive words"). During ten

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years, we have been speaking of “information highways” and of “Information Society”, then came the obsession of the “Network Society”, now the trend is on the “Digital” and on the “Augmented Man”.

We are also evolved from a predominantly industrial society logic to a society where services have become more and more important.

The concept of services has expanded to customers and suppliers and also within each organization in relation to the value creation logic at all levels and the definition of cost and profit centers. Everyone now produces data within the companies and organizations with the difficulty of storing them and with typically EI problem: how to analyze the relevant information faster (especially weak signals) aiming at improving the performance of the company, and this process becomes thus a quality approach.

The spectacular development of ICT, with the addition of new tools and Internet technologies, including Web 2.0 and social networking, has also greatly contributed to the evolution of Quality and of Economic Intelligence.

2. Scientific Positioning

Beforehand, we must explain our Scientific Positioning as a Researcher. Our Scientific Positioning corresponds to University discipline — a French originality — of ICS: Information and Communication Sciences. Within this University discipline, we position in the perspective proposed by F. Bernard (2006) with an articulation of different problematics: link (relation, interactions), meaning, and the construction of knowledge for action.

Our works correspond to Action Research approaches: combining theory and practice to produce knowledge usable to act (V. Meyer) with return of results to stakeholders and to all the actors.

We also situate in Critical Engineering approach, being for us a global and comprehensive approach to the Complexity (Morin, Le Moigne) in an approach by the specific skills at work and not only through academic disciplines.

So we situate in a global, multidisciplinary (cross-fertilization of different disciplines’ point of view), constructivist (social reality built by actors with questions of meaning and social representations), in a systemic dimension of analysis of complexity.

For us, the information corresponds to a “shaping” of the organizations with also giving meaning. Meaning (of the action for the actor) is constructed by the situation and in relation with other people (coordination/cooperation), with the importance of the notions of interaction and contextualization. With a particular attention given to information situations: “a situation of information is rooted in the human relationship, action, and information: contextualized approach for the proposed action (human/tool relation) by the personal and institutional references, which gives the actor valid interpretation keys for action in which he is engaged” (B. Guyot, 2006, p. 156). We also refer to an analytical approach of “situated action”¹ (L. Suchnam) and the observation of the activity at work, including language in the workplace (Borzeix-Fraenkl).

In our analyzes, we also rely on the “qualitative systemic” or “situational and interactional semiotic” proposed by A. Mucchielli (positioning of the actors, interactions, framework of relations, etc.), but by proposing its extension to include the change (approach by processes under a quality approach) and the emotions and experiences of actors.

¹ “Rather than attempting to abstract action away from circumstances and represent it as a rational plan, the approach is to study how people use their circumstances to achieve intelligent actions.” (Suchman, 1987, p. 50).

Also with the importance of the concept of confidence between the actors but also with the tools used: the “digital confidence” in the ICT tools.

3. The Constitutive Concepts: Quality, Economic Intelligence, Territorial Intelligence

We propose beginning with the definitions.

3.1 Quality

ISO 9001 defines Quality by:

- “The excellence of products and services to satisfy more and more demanding customers and conquer new markets.
- Process performance, operation and organization (for compliance, organizing change through projects focused on creativity) to improve productivity and wider drive operational excellence of private and public organizations.
- The managerial practices and modes of cooperation to the satisfaction of all stakeholders, including employees.”

Therefore Quality covers both the organization itself and the production of goods and services (Total Quality Management). With keywords such as customers, performance, process, but also, which is important for our paper: project approach and creativity (innovation)².

3.2 Economic³ or Competitive Intelligence

Officially, the concept of Economic Intelligence (EI) appeared relatively late in France compared to other countries. The Martre’s report (1994) proposed its first official definition: “Economic intelligence can be defined as the set of coordinated researches, treatment and distribution for its operation, of useful information to economic actors. These actions are conducted legally with all the guarantees of protection necessary to preserve the assets of the company, in the best conditions of quality, time and cost. Useful information is needed by the different levels of decision by the company or the community to develop and implement the coherent strategy and tactics necessary to achieve the goals settled by the company to improve its position in its competitive environment. These actions, within the company, are organized around a continuous cycle, generating a shared vision of the firm’s goals”⁴ In continuation of the Carayon’s report⁵ (2003), the EI definition proposed by A. Juillet⁶ (2006) reflects the broadening of perspectives and defines the outlines of a “French EI” with a national strategic dimension: “The Economic Intelligence involves the control and protection of strategic information for any economic actor. Its triple purposes are the competitiveness of the industrial companies, the safety of economy and businesses and the strengthening of the influence of our country. ”

It is worth mentioning a social dimension or better a societal dimension well highlighted by P. Clerc and H. Azoulayin Duval (2008) sharing points with the Swedish approach proposed by S. Dedijer. Thus French EI may be distinguished from the Anglo-Saxon approach of “Business” or “Competitive” Intelligence more focusing on

² <http://www.qualiteperformance.org/comprendre-la-qualite/referentiels-de-management-l-iso-9001-le-management-de-la-qualite>.

³ We prefer to use the words Economic Intelligence because they correspond to the French formulation: *Intelligence Economique*.

⁴ Henri Martre is a French telecommunications engineer. He headed both the French *Délégation Générale pour l’Armement* (DGA) the aerospace conglomerate *Aérospatiale* and the French Aerospace Industries Association (GIFAS). He is considered one of the main promoters in France of “competitive intelligence”, being President of a commission which produced a report important for the beginnings of Economic Intelligence in France.

⁵ Bernard Carayon, lawyer, MP of the Tarn Department, chaired the working group.

⁶ Alain Juillet has been Delegate to Economic Intelligence in France in the Prime Minister Offices from 2003 to 2009.

issues for companies and decision support.

3.3 The Territorial Intelligence

According to J. J. Girardot: “Territorial intelligence is the science having for object the sustainable development of territories and having for subject the territorial community”, with the major role of the inhabitants, the voluntary sector and local authorities. INTI⁷ (International Network of Territorial Intelligence) places a particular emphasis on the territorial community. So Territorial Intelligence means taking control of its destiny by combining existing data but also by building new ones to support a local diagnosis leading to the creation of a territorial observatory including reliance, for example using the Catalysis Method, a method proposed by INTI. During an Org & Co⁸ seminar on Territorial Intelligence (Paris, January 2012), C. LeMoëne, then president of the SFSIC⁹, proposed a broader definition of Territorial Intelligence with which we agree: “Territorial Intelligence is a form of collective intelligence developed on and around an area to think about it and act.” It can have different dimensions, including an economic dimension with the role of business companies.

From a global perspective, territory is not only the interaction between actors, human or economic. It is also built by the memory of men, their representations, the influence of environment (climate, nature ...), the monuments as a human heritage or that of nature ... Still for C. Le Moëne, this approach focuses on “shaping” including objects, leading to the notion of generalized semiotic of territories. For him, semiotics, it is both shaping (giving shape) and setting meaning.

For us, the territory is built by a synergy of projects (Bourret, 2008) concerning different actors, this perspective has gradually replaced the will of a global planner project area including the privileged role of the General Planning Commission and DATAR¹⁰ in the years 1960-1970 in France.

4. Different Possible Aspects of EI

4.1 Enterprise Economic Intelligence (EEI) or Competitive Intelligence

The Martre’s report (with P. Clerc as general reporter), already mentioned, constituted in France twenty years ago (1994) a fundamental basis for reflection and a formal recognition of Economic Intelligence for companies, differentiating from intelligence in its more military origin. Then the definition of EI (see above) reflects this initial positioning.

This EEI or Competitive Intelligence met progressively social networks and Web 2.0. The approaches and skills of Competitive Intelligence evolved with the transition from an industrial economy to a services driven economy and the importance of intangible, they have also been heavily jostled by the emergence of new ICT tools (data mining...) and social networking, both externally and internally. These changes correspond to a 2.0 company where the flow of information decompartmentalizes skills and jobs.

Externally, organizations develop strategies of presence on social networks: visibility, new forms of marketing and customer relations: social network, e-reputation, new ways to innovate and create (open innovation and crowd sourcing) ... (Balagué-Fayon, 2011). Internally, the whole dynamic of ICTs promotes collaborative approaches that profoundly alter the positioning and competitive intelligence practices.

⁷ <http://www.territorial-intelligence.eu/portail/site>.

⁸ Org & Co is a group of researchers within the French Society of Information Sciences and Communication (SFSIC).

⁹ SFSIC: *Société Française des Sciences de l’Information et de la Communication*.

¹⁰ Founded in 1963, DATAR (*Délégation à l’Aménagement du territoire et à l’Action Régionale*) is the Interministerial Delegation for Spatial Planning and Regional Attractiveness. <http://www.datar.gouv.fr/la-datar>.

For M. Perrett¹¹ (2013), this change corresponds to “Social Intelligence”. For him, “Social Intelligence is the New Frontier for Business”. This is an idea of “border” with the meaning of the Far West in the United States in the mid-nineteenth century, pioneering spirit, conquest of new wild territories to develop ... “The ever expanding use of social media and mobile technologies has dramatically changed how we communicate and how we interact with the companies that sell to us. As channels of communication expand to include social media networks, blogs, forums and chat rooms, digital and physical lives are intersecting more than ever. What people do online provides an increasingly accurate picture of their customer profile, including lifestyle choices, buying preferences and brand perception.”

This approach opens up new fields to EI notably in neurosciences but also raises ethical issues about the uses of Big Data, including the impact on citizens’ privacy (sensitive data), especially in Healthcare issues.

4.2 The Territorial Economic Intelligence (TEI)

Economic Intelligence gave birth to another particular variation: the Economic Territorial Intelligence, proposed by the Prefect R. Pautrat to organize a system that makes sense in a coherent strategic view of growth and employment, the various actions of spatial planning, industrial policy and economic development in general, conducted mostly so separated at central and local levels, with an obvious lack of coordination.

This Territorial Economic Intelligence can be defined as the valuation, coordination and protection of economic assets and industrial know-how on specific areas and protection of their SMEs, to turn them into decisive comparative advantages in a worldwide now globalized competition¹².

The TEI is a unified and coordinated system with the essential role of “competitiveness poles”¹³ for regional development (French version of “clusters” proposed by M. Porter). It involves the creation of networks of experts and policy makers, inter-company and inter-government ones, but also between government, business, universities, schools and the different actors of local, social and economic development. It also has a “militant” action of awareness and training in Competitive Intelligence, according to its founders essential to build sustainable competitiveness of French companies.

4.3 The Strategic Economic Intelligence (SEI)

A more recent and comprehensive formulation of French EI is the Strategic Economic Intelligence (SEI).

The strategic dimension of EI was already present in the Martre’s report (1994). In his preface to the book edited by M. A. Duval (2008), A. Juillet had already stressed this: “the term Economic Intelligence is too restrictive...it is likely that the current trend will gradually lead us towards a strategic intelligence concept of applying the methods and tools of Economic Intelligence in every sector of our environment” (2008, p. 15). The notion of SEI (Strategic Economic Intelligence) is within this logic.

This is also the approach proposed by P. Clerc¹⁴, in his vision of a French EI “social intelligence put any strategy in a richer context...basis of collective intelligence...it allows offset the clashes to invent new forms of cooperation at a time when — real paradox — economic wars revive” (Clerc, 2008, pp. 112, 117).

C. Revel¹⁵ is also in this perspective by offering “a multidisciplinary strategic approach... [for] a complete

¹¹ Mark Perrett is Worldwide Social Intelligence Solution Development Leader for HP Enterprise.

¹² http://fr.wikipedia.org/wiki/Intelligence_%C3%A9conomique.

¹³ In French, *pôles de compétitivité*.

¹⁴ Philippe Clerc is since 1997 Director of Economic Intelligence, Innovation and Information Technology in the French Assembly of Chambers of Commerce and Industry. He is also Chairman of the AFDIE (French Association for the Development of Competitive Intelligence).

¹⁵ Former student of the *Ecole Nationale d’Administration* (ENA), Claude Revel career’s is since 1989 dedicated to Business

and professional management of economic and geo-economic challenges of globalization in France” (2012, p. 86) to “regain the initiative and intellectual influence and the principle of general interest” (2012, pp. 231-237). Their social approach of EI correspond to a comprehensive and global approach of intelligence of complexity (Morin, Le Moigne).

4.4 Two Different Approaches to the Social Dimension of EI

We have already discussed a definition of “social intelligence” proposed in particular by M. Perrett (2013), emphasizing the use of social networks to better anticipate consumer needs and to interact with them.

For us, the social dimension of EI may be something else that the definition of consumer profiles for marketing approach.

For us, with specific approaches, EI also may concern the area of the Social and Solidarity Economy (SSE) in the Keynesian perspective of the Welfare State. This emphasis on Social Protection is a French specificity: France devotes a third of its GDP (first in the world) with 12% spent on Healthcare (17% in USA, 11% in Canada and 9% in UK). Note that almost 2/3 of the world’s population has no social protection...

For us, Social Protection is not only a cost (symbolized by the debate on the Social Security deficit in France; nevertheless 5 times lower than that of the State’s Budget while the Social Nation Budget is higher 25% than the State’s Budget), but also an investment, as emphasized D. Libault¹⁶ (2012) and a competitive factor for the Nation, contributing to the preservation and development of its human capital. It was already the view of the Carayon’s report (2003) linking competitiveness and social cohesion and has become even more topical with the economic crisis since 2008.

5. The Articulation of Economic Intelligence and Quality through the Concept of Organizational Intelligence

5.1 Shared Issues and Challenges for Economic Intelligence and Quality Approaches

Quality and Economic Intelligence have the same main goal: to contribute to the improvement of business performance.

EI has both, in every organization, internal dimensions (exchanges and cooperative dynamics) and external ones (control of the competitive environment). With both an informational dimension (giving the right information to the right person at the right time to take the best decision) and communicational (lobbying, influence, but also promote internal cooperation and with customers and suppliers).

The spectacular development of ICT, with the use of new tools and Internet technologies, including Web 2.0 and social networking, has greatly contributed to the evolution of Quality and Economic Intelligence.

Quality as EI must also deal with drifts or abuses.

The issue has been widely discussed by N. L. Duclos (2015). He has highlighted how quality approaches could lock themselves in a logic of quality compliance counterproductive. He insisted on the paradoxical development of quality between conformity and innovation and its possible drifts. For him, the lack of methodological ability of engineers and managers can enhance their resistance to change and involve them in complex and challenging situations. N. L. Duclos also showed that organizational resistance occurs in two steps:

Intelligence. Associate Professor at Skema Business School (Nice-Lille) responsible for EI in companies and president of a consulting firm in EI, she has become Delegate Interministerial for Economic Intelligence(DIIE) in May 2013.

¹⁶ Dominique Libault is General Director of French EN3S (National School for Social Security) and former Director of Social Security in the Ministry of Social Affairs.

first-level challenges, called “nomopathe drifts” appear as a methodological impoverishment of the chosen model and the corrective actions are followed by a second difficulty level constituting a phenomenon termed “computo-cogitational deviance”, a sort of organizational “resilience” corresponding in a transformation of the expected final state in a hybrid end state.

The production of huge masses of data (the issue of Big Data collected in different forms on various citizens’ activities) has accentuated the obsession with quantitative and measurable, with drifts, denounced both by V. De Gauléjac (“The society sick of management”) or by H. Mintzberg’s “remark on an ugly word: efficiency.” (2001, pp. 479-485), or by E. Morin (2013) speaking of “bureaucratic barbarism” where “instrumental reason” has supplanted the “truerationality” or by C. Revel (2012), pointing, after others, the quality drifts and, in particular, that of evaluation (the “evaluation madness” as new “factory of servitude” and with its “impostors” (Abelhauser-Gori-Sauret).

There is also the risk of “always changing” (in French: “*bougisme*” or change for change, particularly denounced by N. Alter.

Thus the challenges and issues are largely the same for EI and for Quality.

5.2 And in the Healthcare Sector?

We have already highlighted the economic and societal weight of Social Protection and Healthcare, particularly in France. The changes mentioned have also largely concerned the Healthcare sector, with all the specificity of the development of e-health (Bourret, 2010).

The French Healthcare System can be regarded as generally effective (particularly in terms of reception as pointed out by the WHO – World Health Organization in 2001 because the country spends a lot of resources (12% of GDP) but few efficient (cost effectiveness versus the amount spent).

First of all we should highlight the central issue of the divisions or walls (compartmentalization) of the French Healthcare System: between the State (Ministry of Health) and the Health Insurance which collects funds, both from companies and employees, between the private sector (so-called “liberals” GP of primary care) and the hospital sector (at 67% public, in relation to the number of beds, but also with a strong private sector: the clinics), “walls” between doctors and nurses between the “cure” and “care”), and between health and social issues.

These divisions or walls are now considered as non-quality challenges: both in terms of care for patients and in additional costs, increasingly unbearable at times of severe budget pressures.

As in all developed countries the challenge has been outlined by G. T. Moore for the United Kingdom (2000) “Managing to do better”, including new uses of information. And, of course, “Quality is imperative” in Healthcare (Kimberly & Minvielle, 2000).

The overall context of the French Healthcare System has dramatically changed in recent years.

Patients are better informed and more conscious of their rights with the Law of March 4, 2002 on the “Rights of sick people and the quality of the Health System”, with the emergence of the concept of “Health Democracy” with the role of associations as CISS (Interassociative Collective on Health¹⁷) and a “legal obsession” about health from the perspective of “perfect health” described by L. Sfez (obligation of results and not just of means). With a commitment to patient responsibility, corresponding roughly to empowerment in Anglo-Saxon countries, but more limited in their level of involvement in the system and consideration of their opinions.

The management of the French Healthcare System has gradually been “regionalized”. The ARH (Regional

¹⁷ CISS–Collectif Interassociatif Sur la Santé: <http://www.leciss.org>.

Hospitalization Agencies) were created in 1996. In the wake of the HPST (Hospital, Patients, Health and Territories) Law, in 2009, ARH became ARS (Regional Health Agencies), but in which the State retains the responsibility (in French “*déconcentration*” and not decentralization such as in Spain, where managing Healthcare is one of the main skills of the 17 Autonomous Communities).

Rather paradoxically, the creation of ARS can be considered as a form of development of State’s control at a time when we may also perceive its financial disengagement.

This State control can also be perceived through the establishment of new Agencies, even if they are presented as independent authorities: ASIP (succeeding in 2009 to the GIP-DMP)¹⁸ and ANAP¹⁹ or HAS²⁰ (succeeding the ANAES) based mainly on a better use of information for traceability of the patient’s care pathway, decision making and the evaluation of institutions, information issues on which we will go back over with the specificity of telemedicine.

Tensions and debates need to be highlighted:

- The tension between traceability (patient care pathway) and thus the effectiveness of care by respecting the necessary confidentiality (medical confidentiality and patient privacy).
- The tension between costs (efficiency imperative: spend better) and the personal values (general interest, public service...), particularly in the hospital, already highlighted by F. X. Schweyer (2010), which we can add that to the standards, referring to Glouberman-Mintzberg (2001) and different circles with their “walls” (governance, managers, physicians/treatment or cure, nursing/care ...).

The development of Quality approaches in the hospital corresponds to an obsession with measurement, quantitative as A. Ogien pointed (2009): “hospital seized by quantification”.

- The tension between rationalization and rationing of care. The obsession to reduce spending grows at pools and mergers of hospitals (health cooperation groups, hospitals poles...) or in Social Security offices, which also often (as in the Universities) will not really reduce costs but induce among agents and among users a feeling of degradation of services. This joins the debate proximity/efficiency well highlighted by the report on the French Healthcare System in 2020 (Polton, 2000).

And we can also mention the delisting of refunding of many drugs by the Health Insurance Companies...

- Overall it’s a more global debate about the positioning of Health: should it be regarded as a commodity like any other goods in an insurance-perspective, or, on the contrary, in the spirit of the 1945 ordinances creating the Social Security in France, should it favor the notion of solidarity and that of Public Service and general interest?

6. Towards an “Organizational Intelligence”?

6.1 A Convergence to Build

For some people, the word quality, too assimilated to rigid standards, compliance, auditing, quantitative methods, can induce problems. They would prefer another term without rally completely to that of Performance.

Some consider Quality as “Organizational Intelligence”²¹. For others, it is the Economic Intelligence that

¹⁸ ASIP–*Agence des Systèmes d’Information Partagés en Santé* : <http://esante.gouv.fr/asip-sante> GIP–DMP: Groupement d’Intérêt Public–Dossier Médical Personnel.

¹⁹ ANAP–*Agence Nationale d’Appui à la Performance-Appui en Santé et Médico-Social*: <http://www.anap.fr/accueil>.

²⁰ HAS–*Haute Autorité de Santé*: <http://www.has-sante.fr/portail/jcms/1249588/fr/accueil>, created in 2009 after the ANAES: *Agence Nationale d’Accréditation et d’Evaluation en Santé*, created in 2005.

²¹ Discussion with G. Véninger in 2012. He assumed the responsibility of Quality Departments in different Hospitals.

corresponds to “Organizational Intelligence”, as for example for P. Clerc who calls in this perspective H. L. Wilensky, who spoke of “Organizational Intelligence” in 1967.

For us, the concept of “Organizational Intelligence” may help converging Economic Intelligence approaches with Quality approaches in a global process approach.

One major link between EI and Quality consists in information and communication situations: Economic Intelligence approaches are used to obtain the right information and distribute it to the right person at the right time for decision support, the Quality approaches consisting in the better use of information to improve organizational performance. This convergence may overpass the “situational and interactional semiotics” prospects (Mucchielli, 2010)²² to incorporate the dimensions of change and experiences (values, emotions) of all the actors in a process approach integrating different times and changes in all types of situations.

H. L. Wilensky stressed the importance of information and the danger of “technicism”. He warns that “the threat of technicism is directly in proportion to the shortage of educated men ...social science is to be incorporated into decision making” (Wilensky, 1967, p. 190).

In his preface to the book of D. Rouach about Economic Intelligence (1999), R. Salmon²³ extended the prospects of EI proposed in the Martre’s report (1994). He highlighted the “EI traps”: information overload, technical specialization (already denounced by Wilensky) which divides the activities, which prevents any dialogue and any overall vision, the rise of uncertainty and instability in the environment.

These “dangers” (technicism/*quantophrénie* or disease of quantitative data) also correspond to the excesses of the quality mentioned above. These risks shared both by EI and Quality approaches and the need to overcome them is a major aspect of convergence between EI and Quality. This convergence can be built around the concepts of innovation, improvement, development, competitiveness and performance, integrating also the issues of territory, all around new uses of information and communication.

6.2 First around Innovation

Innovation is a major point of convergence between Economic Intelligence and Quality, especially if, as G. Garel (2011), we consider innovation as “value creation” for all the actors. In his inaugural lecture at the CNAM²⁴, he first wondered about the often difficult relationship between management and innovation: “Can we manage innovation?”. Is management, as it organizes, finalizes and shapes activity, not contradictory to the innovation that needs freedom and autonomy? Doesn’t organization prevent innovation? He proposed a definition of innovation with which we agree: “Innovation is a new way to create value in the broad meaning, for customers, users, for the entity responsible for innovation or for the individual actors.” For us, innovation is creating value as a synergy of many agents’ activities (individual and collective actors but also artifacts in the spirit of the SAR²⁵ (or network of distributed cognition) with all the difficulty of moving from the individual to the collective activities, from the perspective of daily action highlighted by N. Alter (2005).

N. L. Duclos (2015) emphasized the paradoxical development of Quality between compliance and innovation.

²² “Situational and Interactionist Semiotic” is a method developed by A. Mucchielli. It offers communication professionals, whatever their field of action (consultant, communications manager, webmaster, designer, etc.) a method to understand and predict “the meanings attached to different human expressions and activities. It breaks down a situation in different understanding contexts (spatial, temporal, physical and sensory, issues, standards, positionings, quality of relationships) that constitute reality for each actor.” <http://www.univ-montp3.fr/infocom/wp-content/REC-semiotique-situationnelle.pdf>.

²³ R. Salmon was then Vice Chairman of L’Oreal in charge of the General Directorate of Forecasting.

²⁴ CNAM, in French: *Conservatoire National des Arts et Métiers*, founded in Paris in 1794.

²⁵ Actor-Network Theory or in French, *Sociologie de l’ActeurRéseau* (SAR) proposed by M. Callon and B. Latour.

After the constitution of a decision's support, another major role of EI is also to contribute to innovation.

N. L. Duclos has identified a phenomenon he calls "computo-cogitational deviance", a sort of "organizational resilience" transforming the final expected state in a hybrid end-state. Deviance as resilience, we join C. Dejours: deviance at work is always a form of suffering. Bypassing the limitations of standards for operating the system is also a risk taking and that of possible sanction.

The innovation dimension has been at the heart of developments in the last thirty years highlighted by G. Gramaccia G. (2008) cited above. According to L. Ferry (2014), which placed in the wake of Schumpeter (the "creative destruction", 1942), the "destructive innovation" above profit, is the very essence of capitalism offering constantly new products and services, breaking with traditional values to handle creating needs. Losing its bearings individuals become manipulated consumers. It's also another way to approach from an organizational point of view, the "change for change" or "*bougisme*" denounced in particular by N. Alter and H. Mintzberg.

Innovation also has a territorial dimension (Territorial Intelligence). We thus find the prospects outlined by Godet-Durance-Mousli (2010) report to "liberate innovation in the territories" and, especially, innovation in organizational and/or societal dimension, with the convergence of concepts "*mètis*" (or smart intelligence opposed in Ancient Greece to "*logos*" or "rational" intelligence) and "reliance" and "resilience". The report stressed the importance of organizational and societal innovations while traditionally in France, it is mainly the technical innovation that is valued, whereas it is not creates more jobs.

Innovation processes have also aspects of co-innovation, which in health, may take the form of co-production of services with the patient and his family.

6.3 Articulating "Reliance" and "Resilience"

The crisis of the social link and the need for reconstruction of social ties were often highlighted, for example by S. Paugam (2010). E. Morin and R. Sainsaulieu particularly stressed the need for "reliance" of our entire society, with the important role of "intermediate organizations" and in the first place, the voluntary sector (Sainsaulieu, 2001), especially in health (associations home help, healthcare networks ...). We will go back to this. Certainly with specific approaches, EI also acts in the area of the Social and Solidarity Economy (SSE).

The concept of "resilience" is also essential. It appeared in the physical sciences as the ability of a body to return to its original shape. It then concerned psychology. From "resilience", understood as personal ability of an individual to rebound in a situation of difficulty or distress, we have gradually shifted to the concept of collective resilience of a group or community, to get more recently the notion of resilience of all stakeholders of a territory (Territorial Resilience).

6.4 With Better Use of Information

All these changes are based on new uses of information, information contributing to the "shaping" of organizations and territories, particularly in the Healthcare sector.

In 1996, emphasizing the need to build integrated systems (Building organized delivery systems) Shortell and al. stressed the particular importance of information systems to improve health management (Shortell, 1996, p. XV). According to Grimson et al., "The present inability to share information across systems and organizations in healthcare represents one of the major impediments to progress toward shared care and cost containment" (2000).

Like the United Kingdom in 1998 (Information for Health, An Information Strategy for the Modern NHS²⁶ 1998-2005), the most developed countries (USA, France, Spain, Canada, and particularly Quebec ...) were aware

²⁶ NHS: National Health Service.

of these issues. In the US, the reform committee (US government reform committee) thus considered in 2005 the introduction of information technology in health as the “Last Frontier” (The Last Frontier: Bringing the IT revolution to Healthcare 2005) now with the challenge of using social networks²⁷. In France, the control of information to improve the quality of care and efficiency of the Healthcare System is central since the late 1990s in all texts of laws and ordinances (1996, 2002, 2004, 2009, etc.) especially in new agencies: ASIP and ANAP, already mentioned, and in all discussions. There is a political will (at least displayed ...) to set up a health information policy with use of existing large databases (SNIIR-AM²⁸, IDS²⁹ ...) and the issue of the use of Open Data (rather concerning general data of public organizations) and Big Data with the challenges of protecting the privacy of citizens.

We can distinguish three levels of uses of the information (data) in Healthcare:

- Micro: around the patients’ data (shared medical records) with all the specificity of the use of personal data (privacy and sensitive), and in particular the issue of medical confidentiality. With the issue of traceability, telemedicine and digital care of territories (TSN, in French *Territoires de Soins Numériques*) with, in particular, the issue of medical deserts in rural zones but also in poor suburbs.
- Meso: for the functioning of organizations, both in the care management and in that of organizations as a whole: decision aids (EI) and evaluation (Quality).
- Macro: the strategic management of the whole Healthcare System and its evaluation.

All this is based on the introduction of new ICT tools (for both cost control for better efficiency and improve the quality of care): PMSI (Medicalization Programme of Information Systems) and T2A (Pricing to Activity) for the financing of health facilities, DMP³⁰ (Electronic Medical Record) since 2004 (affirming the notion of care pathways) at the beginning called “personal” and became “shared” at the end of 2014, services platforms (Sophia for patients with chronic disease diabetes proposed by the National Health Insurance³¹), call centers ...

The activities of Telemedicine and HAD (home care) have received specific legislation in 2009 and 2010. Their tools should be integrated into Information Systems regionally shared through the ARS: evolution from Hospital Information Systems (HIS) to Health Information Systems (HIS) managed at regional level. From the point of view of scientific research, we have the challenge of analyzing these tools in terms of “mediator artifacts” of “ordinary actors” in French “*actants ordinaires*”) through the SAR or “situated action” and, above all, “distributed cognition” perspectives.

Data quality is essential. In the context of an intangible economy, a few years ago, we proposed the concept of “sustainable information” both for “more sharing, fairness, innovation and responsibility” and that also implies sharing and appropriate conservation strategies (Bourret-Cacaly-Chambaud, 2008) corresponding, in taking words from the quality sector, to a form of “kaizen” (continuous improvement) with both informational and

²⁷ <http://fr.slideshare.net/LeeAase/bringing-the-social-media-revolution-to-the-last-frontier>.

²⁸ SNIIR-AM: SNIIR-AM: Or, in French, *Système National d’Information Interrégimes de l’Assurance Maladie*. Established in 1999 by the law of financing social security, SNIIRAM is a national database which aims to contribute to better management of the health insurance and health policies, improve the quality of care and transmit to healthcare professionals with relevant information on their activities. <http://www.ameli.fr/l-assurance-maladie/statistiques-et-publications/sniiram/finalites-du-sniiram.php>.

SNIIR-AM is the main database in France. It gathers the French Healthcare System reimbursement data, and shall be progressively completed by data from other databases (for example data from hospitals or from private insurance ...).

²⁹ IDS-*Institut des Données de Santé*: The Institute on Health Data for Public Health gathers the different parts that constitute the French Healthcare System. <http://www.institut-des-donnees-de-sante.fr>.

³⁰ DMP: *Dossier Médical Personnel* created in 2004 became *Partagé* (shared) at the end of 2014.

³¹ In French: *CNAMTS Caisse Nationale d’Assurance Maladie des Travailleurs Salariés*.

communicational aspects.

In a previous work we have also considered the development of e-health as the meeting of Economic Intelligence in its social dimension and Territorial Intelligence (Bourret, 2010) with:

- The challenges of producing collective knowledge, the coordination of activities as complementary to information and communication activities,
- The information needs for decision support and new tools already mentioned,
- Sharing and collective production of knowledge at the heart of the new governance of the Healthcare system.

Now we can extend these prospects integrating them into a new approach of Quality processes.

6.5 A New Approach of Quality Processes for Evaluation as Improvement

With J. P. Caliste, we distinguished three types of processes that characterizes, first by seeking the compliance, second to implement a change, third to promote creativity or innovation in an organization. There is in any organization coexistence of these three types of different processes. It is imperative that a more holistic processes approach takes into account their intrinsic wealth (Caliste-Bourret, 2013).

In our minds, it could be linked to a new approach of Economic Intelligence in relation to Quality and correspond to a process of “kaizen” both informational and communicational also finding a more qualitative assessment, such as development help, improved performance in organizations (Bourret, 2010), relying in particular on a “fair” evaluation to understand better “the iceberg of activity” (C. Dejours) or a “dynamic” evaluation (V. De Gauléjac) to make meaning of action involving all the stakeholders in a perspective of collective intelligence, with all the challenges of the construction of relevant indicators to understand the changes by integrating qualitative aspects, with all the important lived emotions of the actors and the overall context of the activities.

The new Interface Organizations have been developing in France for thirty years and especially the Healthcare Networks may constitute interesting experiments to develop these aspects (Bourret, HDR, 2010).

6.6 With All the Interest the New Interface Organizations

Aiming at analyzing organizational boundaries as spaces of exchange, complementarity and mutual fertilization, we have emphasized the role of Interface Organizations as spaces for innovation, experimentation and development of trust (Bourret, HDR³², 2010), both in the other actors (individuals or organizations) and in digital tools (digital confidence).

Our HDR work has largely focused on the Healthcare Networks. Appeared in the 1980s, especially with the AIDS epidemic and the need for coordination between general practitioners (primary care) and hospital sector and between medical and social, their role was enshrined in law in March 2002. They developed for different diseases (diabetes, cardiology, etc.) or for specific situations (perinatal care, addictions, obesity, geriatrics, oncology ...) with the necessity to clarify its role with HAD (Hospitalization at Home³³) establishments.

Healthcare Networks correspond primarily to an information and coordination structure (such as Infant Bronchiolitis Network in the Paris region) and articulation of the various professional activities engaged in different places but not care, these activities are made separately, often with just a telephone service to guide patients. Pluriprofessions or Medical Homes include different practitioners on the same site, as it is, for example in Spain for *ambulatorios*.

³² In France, HDR or *Habilitation à Diriger des Recherches* is a University degree after the doctorate (Ph.D.) which allows to supervise theses and to apply to the rank of University Professor.

³³ In French, *Hospitalisation à Domicile* (HAD).

Since 2007, the national authorities (Ministry of Health) seem to prefer the Pluriprofessions Homes and encourage their development and that of new federative structures. For example, the Health Network on Diabetes, Revesdiab, in Eastern Ile-de-France Region became the main actor of the new structure of HCS (Health Cooperation Group) Diapason³⁴. Its action in the south of Seine-et-Marne department (which correspond to half the area of the Ile-de-France) has set up a 2.0 Diabetes project to which we are associated.

Other possibilities of cooperation have also emerged in recent years as the PAERPA³⁵ experiments (Elderly people at risk of loss of autonomy) that highlight particular PPS³⁶ (Personalized Plans of Care) (Bloch-Hénaut) which use the concept of monitoring individual patients or care pathways, set up by the Healthcare Networks, applying it to elderly patients. GPS Diapason applies a PPS to diabetic patients.

MAIA³⁷ (Houses for Autonomy and Integration of Alzheimer Patients) were mainly intended to be a unique desk for patients suffering from this disease and their families. They have been developed by the CNSA³⁸ (National Solidarity Fund for Autonomy). They have often experienced the arrival of PAERPA as unfair and unnecessary competition.

These Interface Organizations correspond, as we have already said, to an attempt to answer to the central problem of the “walls” or divisions in the French Healthcare System. But their proliferation, often without real coherence or overall view, according to local initiatives of different Social Security funds or Ministry Departments, can ask questions because it can lead to new divisions and to a loss of efficiency and to increasing costs.

There is also the issue of the development of trust between all the stakeholders, which can be tackled by the method proposed by G. Le Cardinal and his colleagues or Fact Mirror Method to understand complex issues and in particular in the development of Information Systems: Fears, Attracts, Temptations of all stakeholders and make formulate and discuss them (Mirror). It is, more broadly, the question of trust in all the digital tools used (Kaplan and Francou) or “digital confidence”.

6.7 In a Learning Organization

Information can be viewed as the “fuel” to build knowledge in situation which becomes intelligence when it is transmitted to other actors in a process of collective knowledge construction in an intelligent and learning organization.

The organization is said a “learning” organization in the two meanings of the word: it trains its employees throughout all their careers, and also learns from them. It trains but also shapes in the meaning of being shaped, formatted by their expertise and their knowledge.

For CEDIP: “An organization is called a learning one when its structure and functioning foster collective learning, developing a sense of professionalization and not of qualification.

Work situations are exploited for learning. Networking and capitalization are privileged, such as exchanges and organized communication.

Evaluation is part of current practice, it is recognized as a source of knowledge.

The management, heavily involved, aims at bringing in coherence management training and management

³⁴ In French, *Groupement de Coopération Sanitaire*.

³⁵ PAERPA or Personnes Agées en Risque de Perte d'Autonomie, Health Pathways for Elderly: <http://www.sante.gouv.fr/le-parcours-sante-des-aines-paerpa.html>.

³⁶ In French, *Plan Personnalisé de Soins*.

³⁷ In French, MAIA: *Maisons pour l'Autonomie et l'Intégration des Malades d'Alzheimer*.

³⁸ CNSA: *Caisse Nationale de Solidarité pour l'Autonomie*.

skills.”³⁹

The convergence we propose between Economic Intelligence and Quality for an Organizational Intelligence completely corresponds to this prospect of a learning organization built around Collective Intelligence created by the skills and knowledge of all its employees.

7. Conclusion

We have shown the convergence between French view of Economic Intelligence and Quality Approaches with a strong territorial dimension, particularly in the Healthcare sector, towards a more global Organizational Intelligence. Information is the compulsory link, the “fuel” between Economic or Competitive Intelligence and Quality in the spirit of what we might call informational and communicational “kaizen” in a process approach. In Economic Intelligence, relevant and validated information is the main support to the decision. It is also essential to feed the indicators and evaluation processes within the Quality both as control/compliance and as performance analysis. The word “kaizen” deliberately brings us in a perspective of continuous improvement. So we can define Organizational Intelligence as the main component of a Learning Organization.

The word “Quality”, being too often assimilated with standards, compliance, control, audit-punishment, quantitative views, can cause problems. Why not consider a new concept of Strategic Intelligence for Performance (SIP), combining aspects of EI and a revisited Quality in a Learning Organization?

In this perspective, in the Healthcare and Social Protection sector, EI and Quality can thus converge to promote the new role of a new strategist and partner State to “rethink and rebuild the Welfare State” (Rosanvallon). With all the new dimensions of ICT devices and social networks, increasing the interactions between all stakeholders, including patients and their families.

But do not lose the original target. As highlighted in the collective work of the National Coordination of Healthcare Networks⁴⁰, “a Healthcare Network does not produce and does not handle the flow of medical and social data, it solves medico-social problems” (2005, p. 73). This has already been said, in another form, by the US patient met in a waiting room, mentioned by S. Shortell et al.: “You know, I have a pretty simple wish. I want to stay healthy and productive. When I become sick I want to get well as quickly as possible. But I know that costs are also important. So I want to know what’s done to me is really needed and is done as efficiently as possible. Do you think that’s too much to ask for?” (1996, p. 9). It is indeed an “Organizational Intelligence” view to improve performance and service to the patient.

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³⁹ CEDIP (Centre d’Evaluation et de Documentation pour l’Innovation Pédagogique): Compétences et Formation: <http://www.cedip.equipement.gouv.fr/l-organisation-apprenante-a63.html>.

⁴⁰ *Coordination Nationale des Réseaux de Santé* (2005).

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