

***FOR AN ECONOMIC REGIONAL OBSERVATORY
IN FRANCHE-COMTÉ: BETWEEN MUTUALISATION AND
INDEPENDENCE***

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Abstract: Presently, in France the sets of actors are deeply conditioned by the effects of the decentralisation that took place in 1982, and by the competences transfers. By progressively giving importance to the local levels, the French state gave them the first rank in terms of economical development. Nevertheless, in a very changing overall context, the determinants of the companies' localization, and as a consequence the economical attractiveness of territories, change very quickly. As a result it is essential to obtain tools of territorial intelligence that are able at the same time to describe and anticipate the socioeconomic evolutions and also to link the actors who are in charge of territorial development, from the regional to the infra-regional levels. We would like to present an experiment that is taking place in Franche-Comté with the regional development agency (ARD-FC) and which consists in the structuring of a regional resources platform that is associated to semi independent departmental observatories. We will try to describe what was expected from the regional and infra-regional observatory to implement efficient governance, from the project genesis (schedule of conditions and actors consultation) to the philosophy of the conceptual proposals.

Keywords: Observatory, Territory, Space, Time, Regional, Resources platform.

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INTRODUCTION

Presently, in France the actors' games are deeply conditioned by the decentralisation effects of 1982 and by the competences transfers. By progressively giving importance to the local scales, The French State put them at the first rank in the field of the economic field. Nevertheless, in a very moving and complex context, where the phenomena are conditioned by several factors, both local and global, the determinants of the firms localisations, and consequently of the economic attractiveness of territories, change very quickly. As a consequence, it is indispensable to have tools of territorial intelligence that are able to describe and to anticipate the socioeconomic evolutions, whilst trying to respect the coherence between the different intervention territorial levels, from the regional scale to the infra-regional scales.

The observation issue in these encased and linked territorial frames needs the implementation of specific tools:

- Able to integrate time and to allow a quick reactivity to updating and information processing;
- Able to offer several analysis scales and ability to select analysis areas that transcend the institutional cuttings;
- That allow the implementation of shared, recognized and complementary indicators, especially from a skill level to another;
- Accessible on the Internet, from the management and from the exploitation point of view;
- Shared by several actors, without the failure of one of them questioning the exploitation of the whole and that gives a minimum of independence, in terms of functionality and of management.

However, beyond these methodological expected elements, lies the question, that is very crucial, of the sharing of such a tool. As a consequence, we offer to report an experience that is in progress in Franche-Comté, about the structuring of a platform of regional resources that is linked to the theme of the economic development and that is associated to

departmental observatories that are semi-independent.

From the project gestation to the philosophy of the conceptual proposals, we will try to describe the expected elements of the regional and infra-regional observation to implement efficient governance.

1. A DÉCENTRALISATION THAT COMPLEXIFIED THE PAPERwork AND RELATIONSHIPS OF THE TERRITORIAL ACTORS

The décentralisation and territorial recompositions issue

The understanding of the territories functioning is presently a genuine stake of the complexification of the relations between actors, the multiplication of the scales levels, the exigence of coherence in the frame of sustainable development, the volatility of the socio-economic phenomena, are elements that need to consider the territories in their triple dimension: space, time and organisational, to observe and to understand their functioning in order to anticipate their future.

If today the balance of the 1982 decentralisation is clearly positive, we should also admit that in a European and worldwide exchanges frame which is more and more complex, the French territorial management system creates some problems: the paramount paper of the State was never disclaimed, but it is perhaps a necessity to efficiently accompany this decentralisation; the links between the State and the new territorial collectivities remained complex, ambiguous in some cases, confusing in some others. The emergence of new management territories in relation to the increasing importance of intercommunality created confusion, especially in the funding devices. All these elements result from an essential lack in the Law of decentralisation: the institutions were partly reformed by the territorial frame. Thus, we kept adding territorial grades without removing any at any moments. Presently, we are going from a territory settling policy that recommended the classic space approach to a project territorial policy within which the economic development has a paramount importance.

In parallel, intercommunality growth shown that the local grade was included in new forms of

functioning. The territories are there, they correspond to the citizens, and firms present concerns that transcend the communal frame, dispersion of which is a handicap that is more and more difficult to manage, when we know that 80% of the collectives had less than 2000 inhabitants in 1999.

Unfortunately, during the decentralisation, the relative improvement of the management means of intercommunality was not accompanied by the recognition of the micro-regional grade that eventually was justified only in relation with the inability of the traditional territorial communities to solve the local problems.

Presently, territories attract a particular attention, with the development of global approaches that genuinely integrate the whole actors, the whole of their relationships and of their projects. The territory concept keeps its relevance and all the issue consists in the integration of the local in the global. How, through the different management grades, to give a global coherence to the actions that are undertaken, how to concretize the requirements that are identified at the global level by local actions, on which bases should we constitute the observation tools, which information sharing for which actions?

All these questions are emerging from the complexity of the relationships between the different French institutional grades.

1.2. Multiple and shared skills

In the economic field, these difficulties to make clear local skills emerge have a particular illustration. Indeed, the economical development, the promotion we can associate to it, the difficulties we have to manage so as to maintain or create employments, constitute thematic that are absolutely not mutualised. Even worse, strong concurrences appear between the different institutional grades. Thus, the actors who intervene at the different territorial scales lay out entities, that are bearer of a set of potentialities they manage at economical but also social ends³⁶. To do so, they base their thinking on certain bases that are evolutive or not, they describe these entities, by indicating their evolution, but they rarely study the complexity that is a characteristic of the territorial systems, that is characterized by the multiple relations that have the different actors of the territory between with the other ones and with their settled support. Indeed, the different types of data that are used are rarely connected, at the different

required scales to help an efficient decision-making, insofar as, besides, the economical skill was never attributed to a particular decentralized grade.

However firms, employment and the whole factors of economic expansion directly take part to the territories functioning and contribute to their development, through different recognized scales:

- At the regional scale, the economic promotion is a competence, for example through the development of the regional attractiveness. Besides, the regions should guarantee coherence between the professional training and the local firms grid. We may add that the issues of interregional and trans-border cooperation fall on regions, and want the mobilisation of specific data. In Franche-Comté two inter-regional devices are devoted to the economic development. They are the competitiveness pole « vehicles of the future » between Montbéliard-Belfort and Mulhouse ; and the metropolitan network from Mulhouse to Dijon ;
- At the departmental scale, there is still an economic promotion; it often materializes in development agencies that contribute to the local firms development and expansion. Moreover, this grade corresponds to social cohesion, consequently very detailed knowledge of the employment conditions are necessary. Lastly, it is at this scale that the consular structures bring help to the private firms grid with which they have strong relations.
- At the communes and inter-communal scale, the law about the Territorial Administration of the Republic (ATR-1992), determined new frameworks for the local development, with the creation of new structures of Public Establishments so as to net the territory: the Agglomeration Communities (>50 000 inhabitants), the Urban Communities (>500 000 inhabitants), or the Communes Communities in the rural spaces where they constitute the base to develop the Countries, which is the rural correspondent of the Agglomeration Communities³⁷. Then, the law Solidarity and Urban renewal (SRU-2001) reinforced the cooperation devices with the implementation of the Territorial Coherence Diagrams (SCOT) that aim at orienting the development in the framework of the

³⁶The law insists on the idea of interdependent development of territories.

³⁷ GUERANGER (D.), 1999, « De la Loi Joxe à la Loi Chevènement, premiers éléments pour une étude comparative », in "Montagnes méditerranéennes" n°9, université de Grenoble, pp.23-26.

Agglomeration Communities. Concerning the economic development, consequently we should precisely know the firms, equipments and services sharing, and the transport infrastructures localisation, in relation with a territorial context that is intrinsically complex.

- .At a strictly communal scale, the issue of the Activity zones remains crucial, as it is around them that a part of the economic promotion and of the territorial planning. We notice that new territorial frameworks are emerging and they are supported by successive laws, where the needs expression concerning the data structuring is important. Now, it is necessary to manage the concerned territories by deciding between often contradictory requests that should be comforted or refuted thanks to strong arguments.

On that point, the Director diagrams are the angular stones of a coherent local urban development,³⁸ and they are relayed by the SCIT, whereas the countries charts progressively organize the rural spaces. As a consequence it is clear that the different intervention grades make appear needs that are at the same time close and complementary:

- Close, as the data and information base is common to all the entities;
- Complementary, as each intervention grade needs specific indicators.

As a consequence, the intervention needs are between mutualisation and independence, and if they are properly managed, they constitute the base of efficient governance.

- Mutualisation, as the information mass to acquire, to manage, to process and to diffuse is very important and needs some means ;
- Independence, insofar as an important part of the economic development is based on promotion actions that create a concurrence between the different territorial. In this prospect, the data to share are often considered as to have to remain confidential by the local actors.

As a consequence, it is indispensable to develop performing tools that allow gathering, organizing and diffusing a lot of information, so as to support the observation and the help for decision-making, by restoring, as faithfully as possible the

³⁸Director Diagram of Besançon agglomeration of which revision started in January 1996, and that was approved in June 2000.

organization of the concerned territories. Data and information should be spatialized and replaced in a evolutionary time framework, according to the needs of the different actors who are present at the different regional and infra-regional institutional levels.

2. METHODOLOGICAL EXPECTATIONS ABOUT THE OBSERVATION TOOLS

2.1. The observation expectations

As we noticed, territories observation and follow-up are privileged missions of the organization that manage, settle and develop the territory. Knowing the state and the territories potentialities, apprehending the way they evolve according to the devices and the actions that are led, that can be peri-urban or urban, have a dimension which is eminently political and strategic. Indeed, beyond the knowledge, it aims at having elements that are able to evaluate the impacts of the policies and above all of the investments that were accepted. It opens the way to prospect and thus favours a promotion and a coherent and sustainable development of the territory.

Lots of organizations implement observation systems or observatories³⁹, that are more or less open and complex, as the Observatory of territories that was recently implemented in France by the Delegation for Land Settlement and Regional Action (the DATAR that is presently the DIACT) and accessible through Internet⁴⁰. These observatories allow acceding to a certain number of indicators which are regularly updated. For the DATAR observatory for example, three main entries are possible:

- An entry by stake, that presents the indicators from the development dynamics, the territorial cohesion, the political policies and the territories stakes point of view
- An entry by territory, which presents the indicators in a European, national or regional context
- A free entry, which presents the indicators by theme, such as infrastructures, population,

³⁹ « An Observatory is an observation device (of the territory as far as we are concerned) that is implemented by one or several organizations to follow-up the evolution of a phenomenon, of a field or of a territory portion in time and space. Most of the Observatories have the shape of data processing applications in which the data are aggregated and restored in the form of synthetic tables, maps and/or statistical indicators. » (*H. Pornon*).

⁴⁰ Site <http://www.territoire.gouv.fr/index.php>.

employment, living conditions, environment, etc...

These systems fully give satisfaction but they do not always allow efficiently sharing the knowledge, nor really measuring the evolutions with the necessary reactivity.

Indeed, it is not always possible to go out the offered frame, for example by asking to calculate an indicator on a zoning that is composed « with the chart » or on « intervals » that are different from the ones that are suggested as standards by the system. There is not necessarily any dynamic link between the data base and cartography, what strongly decreases the tool « reactivity »

The suggested indicators often remain « simple » and do not really take advantage of the interpretation wealth a crossed-look on the territory can bring. As C. Grasland underlined: « A first research track consists in freeing oneself of the usual official statistics (wealth per inhabitant, unemployment...) and exploring new indicators families, so as to define criteria that can value the “cultural resources” or the “natural resources” and develop a policy to conserve the inheritance⁴¹ ».

In this context, it seems necessary to go back to the concepts that base the development of these observation tools so as to detail their methodological and technical consequences, as well as the organisational constraints without which the aims can be genuinely reached.

Observing⁴² implies to pay attention to the whole system that is in the interests centre. Implementing observation devices impose to control the observation itself and as a consequence, implicitly to understand the observed system so as to be able to partly restore the complexity through the developed tools, that can be called “observatories” or “territorial information systems” or “geographical information systems”. The stake is to control the observation constraints in a multi-partnership context that implies beyond the administrative and political frameworks, cooperation and sharing. Only with these conditions, it becomes fairly possible to produce knowledge that are individually inaccessible. In addition, whatever the interest themes and the fixed

objectives are (in this project framework they are clearly promotion and economical development objectives), it would presently seem incoherent to evoke the territorial observation issue without immediately integrating a space dimension. The space representations are presently in the heart of the exchanges and negotiations between the different actors of territorial development [Lardon, 01]. The assets of a localisation, the problems which are linked to a site, or a region, accessibility, the proximity of the consumption markets, the concurrency sharing are indicators that bear upon the implantation choices of the firms.

Which constraints the observation tools development imposes to us?

- Control time and space, that is a reference and evolution framework for all the phenomena and consequently for the data that describe them. These dimensions allow expressing at the same time the thematic changes but also to take into account the localisations and their evolutions whatever nature the items that are in the concerns centre have. The classical approaches of data bases control the time dynamics that are specific to the data, for a long time. On the contrary, it becomes more complicated to conceive tools that allow apprehending in a dynamic way the space mutations that affect objects and consequently their follow-up (for example the evolution of the micro-techniques firms repartition in Franche-Comté, the space reorganization of some activities, the evolution of the border employment basins since ten years). Besides, in the “globally thinking, locally acting” logic that is imposed by globalization, it becomes indispensable to develop multi-scales approaches that allow replacing the actions and projects territories in broader regional wholes, which operating modes and the dependences are at the interface “local/global”.
- Managing the information multi-perception/multi-representations. The National Council for Geographic Information and Analysis (NCGIA, EU) define the multiple representations as “*the coexistence within a same system of several modelling of the real world*”. In the prospect of the mutualisation of the territorial socio-economic data, it is indispensable to apprehend the visions diversity and consequently the representations one that each actor has of a territory that is common to all; they can be thematic or space representations. We also notice that the multi-perception multi-representation applies to the multi-scales problematic, as each territorial actor apprehends the real through a scale that

⁴¹ In « Un observatoire du territoire européen », <http://www2.cnrs.fr/presse/thema/52.htm>.

⁴² Observation : Action of observing, of considering with a continuous attention Nature, Man, society, so as to know better. Action of scientifically observing (a noticed, described, measured phenomenon). Attentive monitoring to which an alive being, a phenomenon, a system, is submitted. (Le Robert dictionary, 1992).

fits him and thus produces his own representations.

- Sharing and assimilating quality data. The Internet slant, their putting at the disposal of users communities that are broader and broader presently underline the necessity to provide efficient tools that allow their understanding and their sharing in a confident way as far as quality is concerned. Different expectations levels can be defined according to the users kinds. The latter can be gathered according three main families :

✓ The « classical » users for whom the data are the means to answer the questions they have in the framework of their professional activities on phenomena, real world processes. These users do not really know the application fields of the data that are put at their disposal. The meta data provide them a quality seal of approval and a use guide that are associated to the different data which are integrated in the system.

✓ The stake-holders, who represent according to [Spéry, 98] the scientific and the managers. They have general knowledge of the field and of the products they use.

✓ The experts, who gather the technical elite (in the data-processing meaning) and who control the specifications, the structure of the data that are in the base. In this context, the metadata is a resource that supports the conceptualisation, the modelling and the systems implantation.

Presently, in the context that characterizes our « information society » it seems relevant to add to these three big categories the « general public user », who is a citizen who wants to be informed on the territorial context in which he is inscribed, because of a personal project.

However, beyond the aspects that are purely linked to the data, the sharing obviously implies as a preliminary to make the tool durable on the one hand the identification and on the other hand, as it was mentioned by the ARD-FC, the formalization of a motivated and aware of the interest of this information mutualisation partners network⁴³. Downstream, this organizational configuration will oblige to appeal to technical solutions that allow controlling the accesses, maintenance, the diffusion conditions, but also the opening and collaboration with other systems...

⁴³ This formalisation can have different aspects, either contractualisations or chart letters. On this point, there are many examples (ASIT-VD chart letter in the Vaud canton...).

- Defining and calculating relevant indicators. An indicator is not, by definition, an unrefined data. It is the result of the combination of a certain number of data. Then, there lays the interest of the observatories that allow for the mutualization and integrating data from the different partners and thus to generate new information that are individually inaccessible. An indicator interpretation is made with reference to the norms or with comparisons. It is an indicator variable that is significant of a state or even of an evolution (variation rate for example) at a certain perception level. This latest remark leads to questionings such as “*who observe what and at which scale level*”, based that the indicators that are produced at an agglomeration level only can be complementary of the ones that are produced by a Region. These remarks, event if they look obvious, are not presently investigated. The territorial and thematic observatories are multiplying at every level (communes, communes communities, agglomerations, regions, State, without speaking of the targeted projects that are developed at the initiative of interests or projects communities). Nevertheless, no thinking is led on the complementarity of the observation tools in general and on the indicators one in particular.

Lots of observation tools give the opportunity to calculate indicators. However, the majority of these indicators remain statistical (example: variation of the commune people between 1990 and 1999), the suggested systems do not allow to choose the reference dates dynamically. Fixed approaches remains unsatisfactory in the context of a “prospective” observation where the data exploration allows a better apprehension of the phenomena. That is why dynamics indicators construction seems as one of the most important functionality of the observation and follow-up tools.

2.2. The mutualisation step around the observatories

The ARD-FC, as the organizations that support observatories projects, wants to be considered as a privileged « resources partner » of the economical development at the regional level. This goal implies the implementation of a true identification, organization, diffusion and valorisation strategy of the data and knowledge, on the base of the means and resources mutualisation at the regional level, especially by the partnerships promotion for exchange and collaboration. In the project framework, the paper of resource partner implies that the ARD-FC frames

- The implementation of a regional platform that mutualises the different kinds of data and information ;
- The creation of a regional observatory (observation concerns specific actors and allows making comparisons between the departments, but also appreciating the impacts of projects which geographical extension transcends the departmental limits (TGV Rhin-Rhône, doubly of the N19, etc.)

The departments that are associated to the step (Haute-Saône in a first time) frame the implementation of their respective observatories, which functionalities they define.

The making of the suggested system will be based on practices and know-how that take into account the three dimensions that are specific to the projects of that kind:

- The organizational dimension, that is fundamental and impossible to circumvent, without the one any development, whatever its qualities are, would remain inoperative and useless.

We should record the importance of:

- ✓ Thinking on the diffusion norms that are able to guarantee the exchanges and the joint exploitation of the multi-sources data. In this field, identification, according to the kinds of users and/or partners, to the access rights to the data and to certain functionalities (like updating for example) is fundamental.
- ✓ Searching for scale economies that are induced by coordination and optimization of the data typing, as well as by the putting at the disposal of geo-referenced data.
- ✓ Putting in synergy mutualized tools that are accessible on Internet and available on the common data processing market.
- The methodological and technical dimensions that, according to our experience, are strongly linked to the previous element. It will be an adaptation phase of the tool to the real needs of the ARD-FC and of the associated partners. In technical terms, it will be necessary to precisely indicate :
 - ✓ The technical architecture ;
 - ✓ Inter-operability principles between the applications ;
 - ✓ Technical means of data exchanges ;
 - ✓ General principles about the interfaces that should be implemented ;
 - ✓ Request technical means.

The whole works that are led will lead to make data-processing development in the form of data architectures and applicative programs that are integrated within a data and documents mutualisation platform which feed departmental socio-economic observatories, as well as a regional observatory. All these elements operate in network.

2.3. The data and meta-data control.

The data constitutes the raw material of any description and analysis work. It is the element that makes accessible the information for later data-processing treatments. The word definitions are numerous and they vary according to the disciplines. We will keep this suggestion of the NCGIA (National Council for Geographic Information and Application) that identifies the data as the raw result of the measure or of the real world observation that is made in reference to a perception scale of the phenomena. This definition is particularly interesting, as it is adapted to the context which is specific to the territorial information systems for which the space dimension is in the concerns centre. The data that are integrated within the territorial observation tools will be complex data that will inform about phenomena of the real according to one or several preferential space, time and thematic perception levels. Then, the difficulty is to manage coding and properly integrating this message in its space and time context, whilst keeping the structural and functional contents that are specific to the thematic to which it makes references and to the followed-up objectives.

Since [Langran, 92]'s works, as he was a precursor in this field who suggested representing the space-time dynamics thanks to amendments to the T+1, T+2, ... on each graphical entity, until [PEU, 99]'s more recent suggestions, which exploit the concepts of the oriented-objects approach to represent space-time entities (cf. figure 1), the contemplated solutions are numerous. We will develop that point whilst evoking the ARD project.

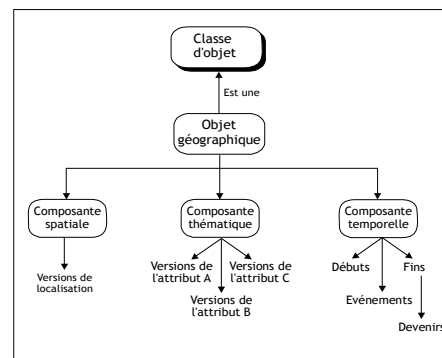


Figure 1: The oriented-objects approach to represent space-time entities. (Translated from [Peuquet, 99]).

Apart from this generic complexity there is another, contextual one. Indeed, as these data generally result from choices that were made in the framework of studies that were led out any observation context and answer the expectations of the projects for which they were acquired, their characteristics are not necessarily adapted to the needs for which they are exploited within observatories. One of the observatories goals is to valorise the existing by mutualisation; consequently it is out of the question to renounce to their integration and their exploitation. On the contrary, it will be very useful to know the conditions and the objectives that prevailed during the acquisition, before starting any study.

That is why the development of territorial observatories not only impose to integrate complex data but also meta-data that are necessary to produce an « intelligent » exploitation. Indeed, in an instrumentalisation logics, that is to say of implementation of an information system that gathers data and applications, the growth of the volume of the data which are integrated in data bases that are often multi-thematic more and more frequently oblige to use quality control procedures and methods, but also merely knowledge about their characteristics. The metadata concept inscribed in this logic, by providing qualitative information on the data that are stocked in a base.

The metadata function is “*to be able to abstract and capture the essential information on the underlying data, independently of the representative detail*” [Kashiap, 95]. Consequently, in theory the meta-data have a paper to play in the making of specific tasks that are assumed by the data bases users, in the field of production, updating, integration, exploitation.

This so-called vision « users », that was developed and used again by several authors contributed to the definition of meta-data levels according to the needs but also to the skills of every one. Thus, as [Spéry, 98] underlines, more the user’s technical skill increases, more the meta-data become complex and give a detailed information. The present standards use again this approach and define a hierarchised organization of the metadata, as it is recommended by the Federal Geographic Data Committee (FGDC).

These different levels allow defining global metadata that correspond to the general description level of the extended metadata that develop the information which were provided at the previous

level and of the detailed metadata that detail the information at the level of each elementary data.

[Spéry, 98] also suggests three levels of data characterization, but this time they are independent of the users’ skills. Thus, he defines the levels:

- Ontological, abstracts that describe in terms of concepts the field to which the data we want to describe are linked (geography in the case of data in regional planning and territory management). In this case, the metadata are at the conceptual level.
- About the diagram and protocol. At this level, the metadata inform the users on the acquisition protocols and on their organization in the considered product (hence the idea of diagram). The metadata inform the user at the logical level.
- About the data themselves and their organization. At this level, the metadata will inform the user on the data files content itself (physical level).

From the content point of view, the metadata provide a detailed description to inform the user on a certain number of points, whatever the fields to which these metadata refer are.

- Data source
- Measure and typing modalities
- Quality that is inherent to the data (precision, correctness, completeness)
- The possible uses

Besides, the specificity of the geographical data that are integrated within the observation systems implies the supplying of information that are specific to the space dimension. By way of example, the FGDC suggests a nomenclature on the base of seven headings:

- Identification that includes the name and the kind of the data.
- Quality that describes the creation process, precision.
- Space characteristics with the used mode (matrix/vector), the geometrical kind.
- The space reference system, that indicated the geographical referential, the projection, the coordinates system.
- The entities and their attributes with a description of the data base diagram.
- The distribution with information on the format, the software, etc.
- The reference with the creator name, the creation name.

In a context of multiplication of the so-called « quality » step and of normalization, the metadata that characterize the geographical information are an indispensable element for the development of the computerized systems of territorial observation, whatever the thematic is. Their goal is to:

- Favour the data exchanges, by helping to define standards.
- Put in correspondence data coming from various expertise fields, and that help understanding multiple semantics.

However, the evoked benefits should not hide the constraints that result from filling in a base, in terms of metadata. The multiplication of the asked elements, that are rarely controlled by the persons who are in charge of the data integration procedures often lead to the operators' discouragement because of the headings complexity and of the time that is necessary to fill them in. As a consequence, it is necessary to find a balance between a harmful sufficiency and an information indigence, that is also harmful as for the harden users as for the neophytes!

However that may be and despite these reservations, the metadata have a role that still remain limited and the users of databases hardly understand the interest, that is yet fundamental, of MUTUALISATION this concept in their daily practices.

2.4. The importance of georeferencing and of cartographic representations

The map is the archetypal media of territorial knowledge transmission. It answers multiple needs that become indispensable, especially the decision-makings. Several kinds of cartography are distinguished:

- Cartography of inventory or reference.
- Cartography of information, research and experimentation (information processing).
- Cartography of explanation or correlation to diffuse the studies results: illustrative roles).
- A cartography that is a support to the planning of the Man on his environment (cartography of intervention).

In an observation and follow-up context, cartography is cartography of inventory, but also of information and explanation. In all cases, the maps production should answer norms in terms of precision, sufficiency, aesthetic, clearness, readability. The maps should be reliable and didactic so as to answer the needs of the daily management and of the help for the decision-

making and to conserve their role in terms of synthesis and of knowledge transmission in a context where the space and the localisations are understanding and explanation elements.

Beyond, the experience proves how, in the territorial observation context, it is important to suggest reactive tools that is to say that allow immediately taking into account the transactions that were made at the data base level. This reactivity should be applied during the production of cartographic documents and of thinking and decision-making supports.

In terms of dynamic cartographic cartography, a quite simple model allows answering these demands whilst guaranteeing a time management and consequently the possibility to take into account the entities space-time evolutions (as a graphic as an appointee point of view). Indeed, it is on the base of the definition of an entity "value" that integrates the data life cycle through time attributes that the evolutions management and follow-up are possible. This ability is particularly interesting during the follow-up of zonings evolutions for example, as in the town planning and land-settlement fields as in the environment field.

3. THE FRANCHE-COMTE EXAMPLE OF ECONOMIC DATA

In a context where the information control and valorisation seem indispensable, the ARD-FC wants to appear as a privileged « resource partner » of the economic development at the regional level in Franche-Comté. This goal implies the implementation of a true identification, organization, diffusion and valorisation strategy of the data, on the base of the means and resources mutualisation at the regional level, especially by the partnership promotion for exchange and collaboration. The resource- partner role implies that the ARD-FC frames:

- The implementation of a regional platform that mutualises the different kinds of data and information;
- The making of a regional observatory (observation concerns specific indicators and allows for comparisons between the departments, but also for the quantifying of the impacts of projects which geographical extension transcends the departmental limits (TGV Rhin-Rhône, doubly of the N19, etc.).

The departments that are associated to the step (Haute-Saône in a first step) frame the implementation of their respective observatories, which functionalities they define.

3.1. General economy of the device

The regional economical observation step that the ARD and its partners want to initiate in Franche-Comté is inscribed in an efficient cooperation logic, that is advanced and efficient in the fields of the local economical development.

This step that aim at a better shared knowledge and at enlightened decision-makings about the Franche-Comté economical problematic will be articulated around a network of collaborative tools. His organization objective is to offer the best solutions of mutualisation of the technical means and to check the integrity of the tools themselves (same structure of database...) that allow a great facility of feeding and interrogation of the base.

In a prospect of means economy (mutualisation of the development expenses, grouped purchase of data, reduction of the data diffusion costs, etc.), the expected device will lay on a data platform on which will be articulated an observatories network (1 regional observatory and 4 departmental ones).

The data platform will allow storing, managing and exchanging data. The informational base that is constituted will be fed by the different users of the device according to access rights and defined administration privileges. This part of the device will not be directly accessible for the public. Nevertheless, after entering on the platform, it will be possible to direct towards the observatories, whilst the platform plays the paper of portal towards the related sites. The platform will welcome the data that are gathered from the providers: ARDFC, ACTION 70, CCI 70, ANPE, ASSEDIC, CAF, Destination 70, Chambre des métiers, DDE, DRE, DRTEFP, INSEE, Inspection Académique, Rectorat, Services Fiscaux, URSSAF (the list is not exhaustive). This informational base will have to be extensible and be able to follow the development of the providers' network. The data introduction, updating or suppression will be done by resource-persons who have the necessary rights.

The Observatory 70 (which is called OSER 70) is the first step of the implementation of a socio-economical network in Franche-Comté. In the long term, the three other Franche-Comté departments could be equipped of a tool that would be built on the pattern of the Haute-Saône one, whereas a regional economical observatory, that will aggregate some departmental data to specific

regional data, could complete this device of territorial intelligence.

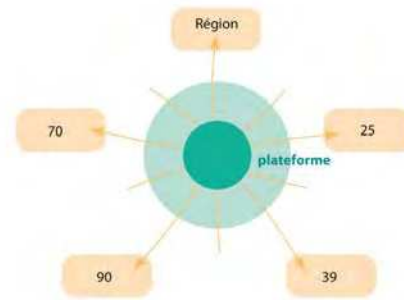


Figure 2: Articulation of the platform and the observatories

The access to the platform will be done through an interface that uses the communication technologies in network via Internet. The observatories will be the place of the data processing and of the working out of the indicators that are defined according to the problematic which are specific to each of them.

They will be able to be equipped of an online window on Internet to diffuse the information about their territory near the greatest number.

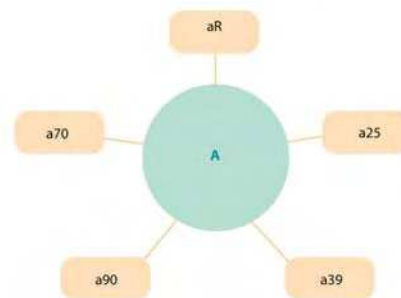


Figure 3: Two administration levels

Each observatory will be controlled by an administrator who benefit from the necessary rights to add functionalities or specific data. He will also be able to modify or remove data. Nevertheless, the data introduction, modification and suppression validation is under the responsibility of the administrator. If necessary and under certain conditions, he will be able to delegate a part of this responsibility to the administrators of different observatories

Taking into account of the actors' needs and obligations

At a regional scale, the inter-institutional and multi-partnership character of an observation tool seems impossible to circumvent. In the framework of the

presented project, that combines regional and departmental observation, the ARD-FC and Action 70 developed some contacts.

A catalogue of available data refers around forty potential providers/partners. Data providers and owners can have different expectations (technical, methodological, training, access to the data) or face specific problems. Besides, they can sometimes have different angles of incidence about the regional planning and particularly economical development. The data to mobilize can be very different. The actors' needs and expectations taking into account seems all the more important as it aims at optimizing the social and institutional benefits of the project, reinforcing the base of common objectives of the platform and observatories network project and bringing a new lighting on the situation in Franche-Comté and on its evolution.

So as to better know the expectations, in a first time we will have to identify all the stakeholders (at the internal and external levels) that can be linked to the project. An identification sheet "Actor" will allow detailing the different points of view on the problem, the nature of the faced problems, the specific needs, the solutions that can be suggested. This sheet could include five items to decline:

- Organization characteristics : organization name status, organization, behaviours, social situation, economical situation, etc. ;
- Interests, expectations, objectives : specific skills ;
- Sensitiveness in relation with the transversal approaches : involvement in federative structures, partnership actions, etc. ;
- Potentialities and weaknesses: human resources, knowledge about a field, information sources, endogenous production of data, experience, know-how, potential contribution, communication tools, etc.
- Involvement in the project: actions that can be led / supported, interpellation methods, implicit or explicit bridge, agreement/ contract, etc.

This part of the work should allow analysing the actors' and local governance system. We are specially interested by the relationships between actors who can be stakeholders of the project

In a second time, we will have to give in prospect the different problematic that can be supported by the observation system that is implemented. A three-stage step is recommended:

- Precisely defining the analyse framework and subject;
- Identifying the major problems that are faced by the targeted groups and the recipients (is/are the problem(s)? ;
- Visualising the problems in a diagram that is called « problems tree » or « problems hierarchy » so as to establish the relations of cause for purpose.

The analyse aims at identifying the real bottlenecks that the stakeholders consider as a priority and that they try to reabsorb during the translation of the problems into intervention objectives.

Lastly, we will have to implement a system of dynamic indicators that can enlighten the structural, space and time evolutions of the observed phenomena (problems), feed the evaluation, the follow-up and the prospect of the public or private intervention. This indicators system will be established by mobilizing the scientific corpus and the professional practices.

It will be possible to consider three categories of indicators:

- Context indicators: the context indicators allow us to have a knowledge of the fundamental situation and returning account of the global evolution of the territory, an activity sector or a firm during an observation period. They are established in relation with objectives that is to say in answer to identified problems.
- Realization indicators: They are about the actors' activity within a territory. They are measured in physical or monetary units (number of manifestations, number of firms that benefited from a financial support, commercial areas that were created, etc.);
- Result indicators: they are about the direct and immediate effect that is induced by the intervention. They give information on the evolution, for example of the behaviour, of the ability or of the direct recipients' performances. These indicators can have a physical nature (welcoming ability, migratory balance, number of road accidents, etc.) or a financial nature (influence of the means of the private sector, drop of the transports costs).

The context indicators are usually generic data as they are exploited by all the actors of the territorial and economic engineering, in a recurring way.

The realization and results indicators are defined at each intervention centre, communities and other

development actors' level. They especially contribute to measure the territory dynamism and to valuate the eventual failures in terms of accompaniment measures.

CONCLUSION

The territorial observation needs do not cease increasing because of the complexification of our socio-economic environment. The expectations we presented and the illustration by a starting project of data and information mutualisation at the regional and departmental scale show how this step is difficult. In the present case, a functional schedule of conditions will allow defining the methodological and technical expectations that will constitute the starting-point of the implementation of this whole of regional and departmental observatories which are associated to a regional platform.

BIBLIOGRAPHY

Kashyap V., SHAH K., SHETH A. « *Multimedia database systems : Issues and research directions* », chapitre « Metadata for building the Multimedia Patch Quilt ». Springer Verlag, 1995.

Langran G. « Time in geographic information systems ». London, Taylor and Francis, 1992

Lardon S., Maurel P., Piveteau V. (sous la direction de). « *Représentations spatiales et développement territorial* ». Editions Hermes, Paris, 2001, 437 pages

Peuquet D. J. « Time in GIS and geographical databases ». *Geographical Information Systems, volume 1, Principles and Technical Issues*, Edited by Paul A. Longley, Michael F. Goodghild, David J. Maguire, David W. Rhind, 1999, p. 91-102.

Spéry L., Libourel T. « Vers une structuration des métadonnées ». *Revue Internationale de Géomatique*, Volume 8- n° 1-2/1998, p. 59-74.