

The Competitiveness Poles as a Source of Organisational Learning: Case Study of an Innovative Walloon Project in the Life Science

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Abstract The purpose of this paper is to apply the learning dynamics theories to a case study focused on a project launched in the context of the Walloon Marshall Plan. The analysis on the intra and inter organisational level of learning, and the concepts of exploitation and exploration are investigated. The managerial innovations are considered as organisational learning processes. We also focus on a major issue – the creation of a public company – presents in an R&D project of the Walloon life science competitiveness pole. Around that issue of permanence, as daily in the project, the partners are invested in negotiation, compromises, back and forth, appearing as huge learning sources and putting collaboration to a severe test. We conclude with the identification of the contextual conditions favouring learning.

Key words competitiveness poles, learning, network, innovation.

1 Introduction

Our purpose is to analyze the learning dynamics emerging from the new types of partnerships that the Walloon competitiveness poles promoted by the Marshall Plan in 2005 constitute. Indeed, it is about the new forms of partnerships that, because of their reticular forms, present particular configurations, having already done the subject of numerous investigations [1]. Resting between market and hierarchy [2], the new forms of organisations see their traditional boundaries being redefined in order to hand over a larger place to interorganisational cooperation [3]. The network functioning progressively becomes called as one of the major technological innovation strategy and economical development. This strategic choice is put into practice as well in huge private enterprises as in regional and European public policies [4]. In order to seize the learning characteristic of these networks, we focus in particular on the learning dynamics. In order to know the managerial action better, reviewing managerial innovations as organisational learning processes and threatening the management as a cognitive operator appears as relevant [5]. To speak about dynamics is to consider the evolution of one situation to another. To stop a situation to paint a picture of it seems harmful. The analysis of the dynamics is much more fertile and close to the ground reality. The analysis of the situation is all the more reason complete, without however claiming exhaustiveness, that it integrates more information about the explaining factors of the evolutions of the project as far as collaboration and learning.

We suggest distinguishing two dimensions of the learning dynamics. On the one hand, the dynamics that link the learning way coming within the *exploration* and that one coming within the *exploitation*. The *exploitation* [6] is a process during which the organisations learn how to refine their ability, how to exploit their existing knowledge, how to focus their activities on some fields. In order to offset these counterproductive effects, the organisations also need to create variety in the experience, by experimenting, innovating and taking risks. It is here question of *exploration* [7]. The literature related to the interorganisational learning considers usually either one or the other of these types of learning without examining their interdependences [8]. The originality of Holmqvist [9] is to propose a theoretical model stressed on the dynamics that link exploration and exploitation. In this model, the transitional dynamics of an exploration learning to an exploitation learning and vice versa are referred by the terms of « opening-up » and « focusing ». The *opening-up* occurs when the organisation goes from a learning process oriented to the exploitation to a learning process of exploration. This transition answers to a need of adaptation of the organisation in its ways of doing or in its products, in function of the environmental changes. The *focusing* occurs when the organisation goes from a learning process under the shape of the exploration to a learning process oriented towards the exploitation. This transition signals the end of the experimentation and is characterised by the search of solutions.

On the other hand, the dynamics that characterise the articulation between the learning on an intraorganisational level and the learning on an interorganisational level. It seems that the learning processes are usually considered, in the literature (1) at the level of the relation between the individual

and the organisation [10] – that is how the members of an organisation learn within it, (2) or describe the learning processes inside the organisation (introducing terms like the learning organisation, for example) [11], (3) or tackle the learning processes in the interorganisational relation [12] – that is how the organisations learn in the framework of collaborations -, but the studies do not often take into consideration the articulation between these two last levels [13]. So, Holmqvist [9] suggests integrating this articulation between the intra and interorganisational learning into the analysis. The dynamics he identifies are the *extension* and the *internalization*. The *extension* happens when the learning, concentrated until now inside the organisation, spreads to the interorganisational level. Hence, the extension is the result of a greater transparency of the individual organisation that denotes a will of sharing experiences with other organisations. The *internalization*, conversely, constitutes the process by which the learning carried out at the interorganisational level is reappropriated at the level of the individual organisation. Hence, the internalization represents the receptive capacity of the organisation in relation to the experiences of the other organisations.

2 Context

We focus our research on an R&D project from one of the five wallonian competitiveness poles. This project is constituted by a network of 19 partners. It links, often for the first time, wallonian partners of different worlds: universities with industries, imaging techniques with cell biology.

The project has a particular ambition on which we focus our analysis: the creation of an autonomous society that ensures the permanence of the network and of the research and innovation works initiated during the four years of regional financing.

3 Methodology

In order to acquire a good understanding of the project in its multiple dimensions and components, we constructed our data collection around two types of information: the factual elements and the elements from the talks.

The main entrance for the collection of this information was first the analysis of the official documents open to the public, then the observing of the meetings inside the project, finally the carrying out of numerous individual and collective interviews. These last ones took the shape of half-structured interviews or informal discussions, and were renewed with some key partners (longitudinal interviews) to better identify the temporal evolution of the project.

4 The Project

This project, initially based on four pathologies, has as ambition to merge the potentials of each entity. With the scientific advances, the project evolves towards a divided structure. So much so that after a few months, the different workgroups invested on the pathologies work daily on an autonomous way in the project.

Even if each group presents various characteristics in terms of investments, results, advances, we will set out to present here the common denominators of these sets. Some partners did already collaborate with others previously. But the synergy with a so large number of partners is new and its result is uncertain. The organisational innovation is mainly present in the partnerships composition, in the interconnection of entities (often) unfamiliar, mutually unknown. Hence, we observe an **opening-up** process on external worlds, that is in the transition from exploitation to exploration from each member invested in the project. The exploration approach can be illustrated in the way of organising the competences, and in working together on the interorganisational level. The scientific and technological body of the work (exploited at the intraorganisational level by each partner of the network) is rather located within the peculiar competences of each single partner and so can be identified as **exploitation** of know-how. Indeed, in each workgroup, everyone exploits his/her abilities. Pockets of relationship are set up around the expertise of everyone. Hence, the interorganisational learning is located in these pockets (and not at the level of the whole project), quite independent from each other. Besides, we can notice that the plenary meetings are extremely scarce.

The moments of meeting where the interorganisational learning is the most intensely identified are the workgroup meetings. During these, everyone presents its data (results of the intraorganisational exploitation), each partner learns from the others and the group tries, thanks to discussion and the sharing of various ideas (opening-up) to find a common way (focusing on the way of gathering the data and expertises of each partner). This ensures the externalisation of the work and the sharing of it with

others, who will internalize it afterwards.

In order to favour collaboration as much as possible, unifying organs and a coordinator are present in the project. The unifying organs are 3: the Council, the Business Development Committee and the G7. The Council has the power to make decisions. The Business Development Committee is invested in the promotion of the results and has a consultative power. Finally, the G7 is involved in the management of change, of partnership and of potential conflicts). It has also a consultative power. These organs and the coordinator maintain regularly the links between the different partners, and they are the guarantor of the communication and the learning between the partners at the level of the whole project. The collaboration, except formalized exchanges, appears as difficult to establish. Some partners – for who the project represents on average a workload of 5% of their activities – do not spontaneously implement the recommended sharing practices.

The practices, methods and views of the different partners turn out to be sometimes obstacles to collaboration. The action logics and the priorities of the academics do not seem to be the same as those of the industrials. The references used by the clinicians do not necessary meet with a response to the academics. The persons invested in fundamental research do not always understand the stakes of applied research and vice versa.

In order to synthesize our intentions, we can affirm that, within the project, the innovative organisational elements are to be found in the network process. The learnings are around it. It involves intra and interorganisational relations, back and forth movements between exploitation and exploration with the development in-house of the core business and innovation in the relation with others as a sign of exploration. So as to analyse more precisely one of the elements that, according to us, is a moment of learning, we will target on the creation of a company.

We put forward the hypothesis that the transition from that project – project set up around the financial support of the Walloon Region and rested on strict development rules – to a company independant from the Region on the financial level as well as on the strategical level is a moment of learning.

5 The Creation of the Society

During the development of the project, the idea of creating a society is already mentioned. Hence, all the partners are aware of this way of prolongation of the project and the discussion about the creation of the society is open to all actors. The partners are mainly favourable to this idea and see the creation of the company as a point in the favour of Wallonia. But the company being only a vague idea, everyone imagines it in his way, proposing different alternatives of functioning.

One year after the launching of the project, under the impetus of the coordinator, meetings and discussions are established between some partners of the Business Development Committee about the kind of company to create. Many trails are expounded. Negotiations and debates on the program, the partners go from a pre-established idea (a service company) to various scenarios. This shows opening-up at the interorganisational level and consequently learning. In accordance with Holmqvist's theory [9], opening-up is not easy. It is constituted by calling into question and doubts. A huge number of questions do not reach responses since the potential responses, the will and the stakes are varied. The partners of the Business Development Committee are aware of their knowledge gaps relating to the creation of such a type of structure. This lack prevents them from getting ahead and taking a collegial decision. In order to clear the way, opening-up and exploration interorganisational steps are undertaken: first of all, the project coordinator and some other partners meet an investor group specialised in start-ups, then the services of a consultant are called. He will follow the project in its continuity.

These opening-up processes and the exploration of the different trails lead to a focusing on three scenarios [14]. The focusing is a source of relief, but it is not enough: which scenario to follow? Do they have to establish a company centred on the product, on the services or both?

After reflections (exploration) on the link between the project of creating a company and the scientific reality of the project, only one out of the four pathologies investigated is seen as the potential holder of the marketable innovation.

The choice of the shape (services company) and of the product (focused on a particular pathology) of the company has implications on the composition of the partnership according to a logic « winner-loser ». The choice of a scenario and on a group involves the abandonment of some partners. This might modify the current collaboration. The impact of this crucial decision step on the interorganisational learning should not be neglected.

The choice of the partners made, tensions arise concerning the most opportune moment to create this enterprise. The Business Development Committee and the G7 opt for an immediate creation.

The successive choices appeared as little transparent and/or oriented to only a few number of partners. While the two authorities with a consultative power stop their choice on the immediate creation of the company, the Council, which has the power to make decisions, opts for the report of the creation to a later scientific research stage. Doing so, the Council claims its autonomy. This decision results from its desire of reasserting its role and its importance. It is willing to remind members with a consultative power that their opinions are not authoritative and that, consequently, the Council can not be by-passed in the decision process. So as to prevent that choices are taken in parallel, like it already seems to be the case, the Council takes an additional plunge by suppressing the G7. Most of the partners give their consent to these two considerable decisions (the report of the creation of the company and the withdrawal of the G7). Hence, we can ascertain that on the interorganisational level, the parties reach a consensus on the way to go on (working together) through the working out of formal strategies and objectives. We are here typically in a case of focusing such as described by Holmqvist [9]. This highlights the difference of stakes between the partners. They learn about the others and themselves. They notice the need to take into consideration the interests of each. This will probably have consequences on the future interorganisational learnings and on the partners' motivation.

6 Conclusions

The wallon financing gives the impetus to new learning both on the intra and on the interorganisational level. Indeed, on the intraorganisational level – that is in the daily work of each partner – we could notice **internalization** processes of the decisions taken between the partners. During the meetings between scientific tasks, new ideas are expressed and are reappropriated internally. But, this process also happens in the will of creating the company: decisions are taken on the interorganisational level and need an implementation internally within the partners. For example, this consists in the search for investors, the mobilisation of particular workforce working for the company, the respect of specific confidential rules, the greater search for development.

At the interorganisational level also, the project in itself and the will to set up a company are learning sources. Learning is built up around the scientific tasks. The meetings ensure the emergence of new ideas thanks to the cross-fertilization of knowledges internally. Consequently, an **externalization** process is under way. In the same scheme, they are also a place of **opening-up** when the partners let know their urges, opinions, assessments opening the door to various scenarios. These moments of opening-up are not easy. The partners seem sometimes lost in the multiplicity of the possibilities, perplexed towards the decisions that have to be made. Fortunately, these moments of **focusing** ensure to fix on some things so to get ahead again.

We could observe that **exploitation** is rather located on an intraorganisational level, while **exploration** is located on an interorganisational level. Each partner has been chosen and is actively involved in tasks stimulating its core business, implementing knowledge, know-how, methods or techniques which he has the perfect command. It is the sharing of the expertises of each one that ensures the partners to broaden their initial ability area and to explore jointly the research trails that they could not take alone.

The learning context encourages the **changes** in the organisational dynamics. Indeed, the decision making process has been changed in the course of the trail so to counter the influence of the parallel authorities and to reassert the importance of the Council. A consultative body has been suppressed; influent, expert and enlightened actors are added while others, less relevant left. Gradually, the stakes of everyone were revealed, notably in the decision of permanence, and were, as far as possible, taken into account. In the case which concerns us, some conditions can be highlighted for their ability to encourage the interorganisational learning: times of meetings between sub-groups, constant contacts between the partners, an organisational structure (consultative body, coordination body, decision body) and a well-defined executive work.

Hence, the competitiveness pole, through one of its R&D project, represents a cooperation work made up of constant back and forth between the inter and the intra level, opening-up and focusing, exploration and exploitation, and, consequently constitutes an interorganisational collaboration case which is a learning opportunity.

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- [13] Ingham, M. and Mothe, C. "Apprentissage organisationnel et coopération en R&D" *Actes de l'AIMS*, 2007.
- [14] - either a society centred on the product : this would mean that the choice of the partners taking part to this project would be oriented by the choice of the product. The interorganisational collaboration would then probably have a different configuration than that one of the current project.
- or a service company : the choice would then be less oriented in the type of partnership. The interorganisational collaboration between the partners would be defined in function of the clients' demands.
- or a mixed company (services and products) : this suggestion is not recommended by the consultant, who sees a too high risk of divergences of interests between the partners, and difficulties in collaboration and intellectual property sharing. The interorganisational learning process might not be easy in this hybrid configuration.