

Action Research Projects: one step ahead in the researcher-practitioner relationships

Proyectos de Action Research: un paso hacia adelante en la colaboración investigador-“practitioner”

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Abstract

This study pretends to highlight the usefulness of developing action research (AR) projects as a way to develop a set of integrated studies based on a dual contribution: academic and managerial ones. The concept of AR Project goes one step ahead in terms of AR methodology as an extended case study. We describe an specific AR Project associated to a doctoral theses in the field of innovation intermediation. As main results, we have learned from this experience that (1) the relationship between researchers and practitioners must be collaborative and based on trust and commitment, (2) an AR Project is broader and more complex than a case study, (3) the diffusion of research results must be differentiated for practitioners and academics, and finally, (4) the AR Project is an open and collaborative innovation practice.

Keywords: *research methods; action research projects; researchers-practitioners relationships.*

Introduction

Developing new and applied knowledge is a constant challenge for academia. However, in many cases, that knowledge does not satisfy the needs of companies and their managers. In response, action research (AR) is argued to be an appropriate methodology to develop actionable knowledge useful for academics and practitioners (Sexton & Lu, 2009).

AR is a generic term, which covers many forms of action-oriented research. It acknowledges in theory and practice among action researchers, so providing a wide choice for potential action researchers as to what approach might be appropriate for their research question. AR is an established and active field of scholarly activity and practice, constantly developing (Coughlan & Coglean, 2016, p. 233). AR has come to be understood as a family of practices expressed through modalities which emphasise different assumptions,

contexts and starting points (Coghlan, 2010).

In this study, we pretend to show a particular modality of AR: the AR Project. This concept is linked to the design and implementation of a project that includes a serie of research studies and techniques under a common objective. For this purpose, we present the experience of a doctoral thesis about innovation intermediation that is carried out as an AR Project. With it, we pretend to demonstrate that the AR Project is a research tool which not only facilitates the integration of different methodologies, if not also it is useful to develop research lines in the long term. These features allow to AR Projects to be more versatile and effective than traditional AR studies based on extended case studies.

Empirically, we develop an AR Project which is associated to the doctoral thesis titled “The role of industry associations as drivers of strategic management of innovation in industry”. Its main objective is to define and characterize the role of business associations as innovation intermediaries of their affiliated companies.

This thesis fits within the literature that analyzes industry-university relationships. Thus, our study considers the statements of Perkmann and Walsh (2007) who emphasize that these relations must advance towards a greater integration in subjects of organizational character and collaborative relationships. Likewise, we are agree with Friesike et al. (2014) who describe a number of emerging trends in the relationship of open science between academy and industry, drawing on interdisciplinary studies and non-narrow environments such as those based on personal relationships. This study fits perfectly, from this point of view, in that it picks up multiple methodologies, there are researchers from different fields and the relationship is presented between a group of researchers and BAs, and not between individuals. Additionally, we argue that AR Projects could be considered as an open innovation practice where the flow of information is reciprocal, which agrees with the study presented by Buganza and Verganti (2009), where the company-university collaboration stands out as an open innovation activity.

We believe that this study could encourage researchers to develop AR Projects as a means to create a framework for research work, where practitioners (companies, organizations or other social actors) can be integrated into research teams and academic results contribute to the analysis and improvement of a concrete social reality.

This paper is divided into three parts. The first part deals with the origin, definition and dynamic behind AR methodology. Also, we present the emerge of AR Projects how a new paradigm for management research. Second, the study describe a doctoral thesis as an example of AR Project. Finally, we point out several lessons learned as experience of the study and practice of AR Projects.

Action Research methodology: origin, definition and dynamic

The concept of AR first appeared in Collier's research (1945) and later, the studies of Lewin (1946), Chein et al. (1948) and Curle (1949) developed the concept. Lewin (1946) pretends that the research helps to the agents of the organizations and not only that this one is dedicated to produce books. He affirms that it is necessary that both research and action go hand in hand. Chein et al. (1948) develop the concept of AR in more detail and they establish the four “varieties” of AR: diagnostic, participative, empirical and experimental. Finally, Curle (1949) adds to the previous works, that AR aims not only to discover facts, but to help modify certain conditions experienced as unsatisfactory by the community. In this way, the researcher must know what results he intends to achieve and why.

According to Shani and Pasmore (1985, p.439) AR may be defined as “an emergente inquiry process in

which applied behavioral science knowledge is integrated with existing organizational knowledge and applied to solve real organizational problems. It is simultaneously concerned with bringing about change in organizations, and developing self-help competencies in organizational members and adding to scientific knowledge. Finally, it is an evolving process that is undertaken in a spirit of collaboration and co-inquiry”. It is important to highlight that AR is an emergent inquiry process which, in words of Lewin (1946, p.206), is conceived as "a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about the result of the action". Its aim is to solve real organizational problems through the integration of diverse knowledge. Besides, this process generates various results like organizational change, competence development, and scientific knowledge. Additionally, this research process enables a dynamic of collaboration, co-inquiry and open innovation. McNiff and Whitehead (2010) synthesize this concept through particular features of AR (see Table 1).

Table 1. Main features of Action Research

Action Research is ...	
<ul style="list-style-type: none"> • practice based, and practice is understood as action and research; • about improving practice (both action and research), • creating knowledge, and generating living theories of practice; • focused on improving learning, not on improving behaviours; • about research and knowledge creation, and is more than just professional practice; 	<ul style="list-style-type: none"> • collaborative, and focuses on the co-creation of knowledge of practices; • involving interrogation, deconstruction and decentring; • demanding higher-order questioning; • intentionally political; • about requiring people to hold themselves accountable for what they are doing • about accepting responsibility for their own actions; • about contributing to social and cultural transformation.

Source: McNiff and Whitehead (2010, p.17)

Although the previous definition is focused on “the process”, it does not show who builds and develops it. Therefore, Coughlan and Coughlan (2002) point out researcher and practitioner interact along the AR process and they highlight that practitioner is an active agent there. Thus, AR represents a paradigm of understanding researcher-practitioner relationships that will have a growing relevance, and that is a useful tool to improve the competitiveness and relevance of both firms and research groups.

Regarding to practitioner role, Alfaro and Avella (2013) present two types of them. The first type is the classic practitioner, who was originally defined by AR from social sciences and who has an active role like analyzed subject, but less active to propose solutions. These practitioners are, for example, students in education, patients in medicine or influential agents in psychology. From another perspective, the second kind of practitioner acts on behalf of an organization that needs to solve a problem, and therefore, this practitioner is more active because not only he is an analyzed agent, but also, he acts hand to hand with the researcher to solve organizational problems. This is the case for the management research, specifically at fields like strategy, information systems, operations management or innovation, which is the one that is developed in the empirical section of this study.

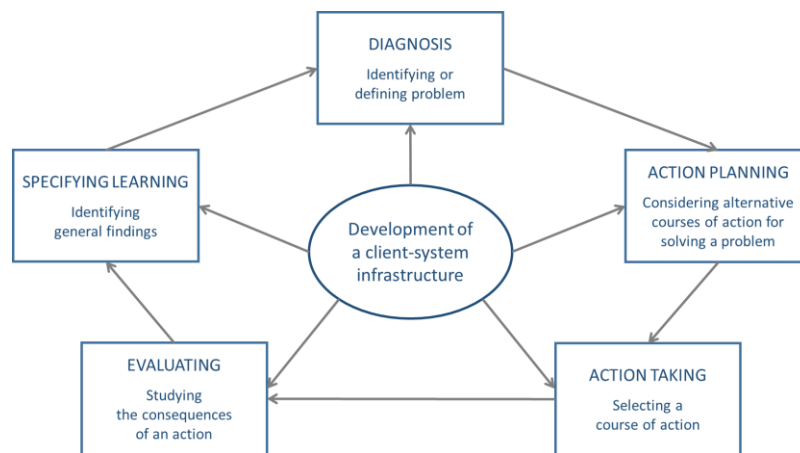
The participation of both, researchers and practitioners, in the AR process depend on the AR’s variety, where Chein et al. (1948) explain the roles of these agents in each type of AR processes, as follow:

- *Diagnostic AR*: the researcher carries out an analysis of the problem, in order to find out the causes and suggest to the practitioner, actions to solve the problem.
- *Empirical AR*: the researcher notes a phenomenon that is happening, he follows the process and shares his results with the agent of the organization.
- *Participatory AR*: The researcher maintains an active and close contact with the agent of the organization; thus, both are part of the research team and interact constantly in the research process.
- *Experimental AR*: The investigator performs different experiments to solve a problem.

Under a procedural view, if we organize these types of AR processes in line, it is possible to discover a series composed by several phases and moments. Thus, for example, a researcher could design an AR investigation beginning with a phase of Diagnostic AR, following with an Empirical AR and ending with an Experimental AR.

On the other hand, some authors have defined different stages associated with a cycle of AR process, and most of them coincide in including the following five stages: diagnosing, action planning, action taking, evaluating and specifying learning. The study of Meredith et al. (1989) defines an ongoing cycle of research stages and it signals AR as an alternative methodology to traditional quantitative techniques in operations management. In this sense, Susman and Evered (1978) talk about the “cyclical process of action research”. It includes the five traditional phases, but also the development of an infrastructure within the client system and action researcher that maintains and regulates some of or all of these five phases jointly (Figure 1). Within this cyclical process, Coughlan and Coughlan (2002) emphasize the role of monitoring to manage the interactions and assuring to get the double objective (academic and practical) of the research.

Figure 1. The cyclical process of Action Research



Source: Susman and Evered (1978)

Based on Westbrook (1995), Avella and Alfaro (2014) propose an additional stage should be included: dissemination or diffusion of results, which includes academic contributions and practical results, as well as the proposal of new actions for the next phase.

Additionally, Zuber-Skerritt (2001) adds a new element to understand the dynamic of AR process, “the

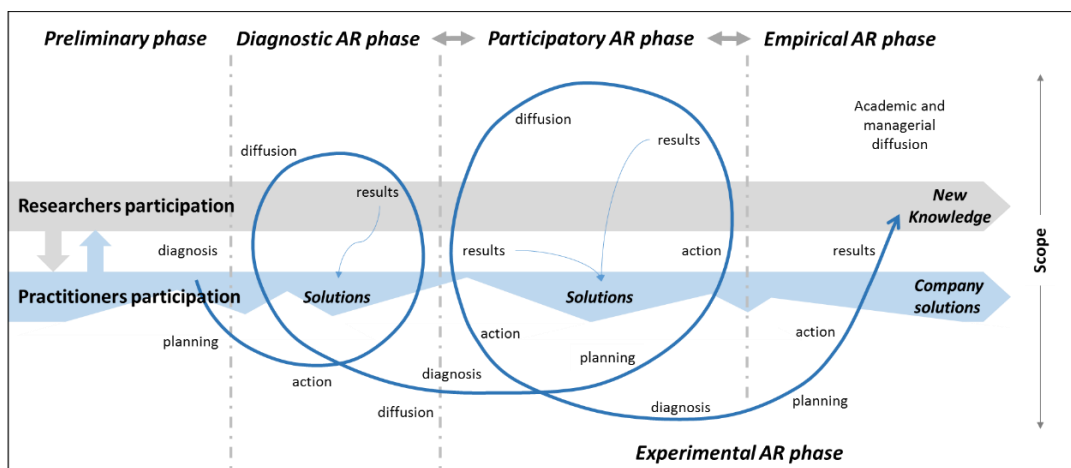
spiral of AR cycles”. According to him, a spiral of AR cycles is a succession of cycles similar to Susman and Evered’s (1978) cycle shown in Figure 1, through which the teamwork composed by researchers and practitioners feel and are responsible for solving a problem. This chain of cycles is characterized because, at the end of each cycle, the teamwork performs a reflection on results, and it proposes a new cycle on the basis of the learning obtained previously. This iterative relation among AR cycles is called by Maestrini et al. (2016) “the action research cycle reloaded”, which they consider an effective research methodology in the field of purchasing and supply chain management.

Emergence of Action Research Projects

According to the above, the dynamic of an AR process is composed by the interaction between the AR types (AR’s variety), the cycles of AR stages and the spiral of these cycles. In consequence, we propose the concept of “AR Project” to integrate these three constructs. In this sense, an AR Project is a broad concept that includes and interrelates, in a flexible way and different moments, diverse AR types, cycles of AR stages and research methodologies under a particular spiral of cycles to get a general aim. Thus, the types of AR process acting like big phases or long time periods under which several cycles can be developed. In this definition, “flexibility” means that researchers and practitioners can combine the types of AR process among them, and parallel, they can develop several cycles of AR.

Under an integrative perspective, in the Figure 2 we describe the spiral of an AR Project in which it is possible to identify different phases and cycles. We added a preliminary phase that represents the first time when researchers and practitioners get in touch and they share initial ideas and needs. After it, the project develops others phases (in a concerted order between researchers and practitioners) and many cycles of diagnosis, planning, actions, results and diffusion. The diffusion emerges at academic and managerial levels, and its effects represent solutions for practitioners and new knowledge for academics. Also, a particular impact of diffusion is the incorporation of new researchers and new practitioners, who pretend to obtain the same benefits of existing agents. Note that, in general, the participation of researchers is continuous over time, while the participation of practitioners has different rhythms and it depends on the moment of the AR project. An additional aspect of this model is referent to its scope, which tends to expand over time. For example, with each phase and cycle, the number of practitioners increase or the research geographical area is broader.

Figure 2. The spiral of Action Research Project



In sum, we consider that AR Project perspective is crucial to understand the new framework that must define the researcher-firm relationships. Ottosson (2003) considers that the AR collaboration is crucial to improve the knowledge of management, and highlights two aspects for understanding the role of AR as a new research paradigm. First, AR must have a dual relevance that implies to develop contributions to the academic literature and to help firms to solve a problem and/or to identify an area for improvement in the firm. Second, this double objective implies that practitioners must be involved in the research group from the very beginning. So, the researcher aims to solve a problem not “for” the practitioners, but “with” them.

A doctoral thesis as an example of AR Project

In the cyclical process of AR presented by Susman and Evered (1978) in the Figure 1, it is possible to observe that in the axis is the “development of a client-system infrastructure”. From a management perspective, Maestrini et al. (2016) locate in this point the “monitoring” pointing out that this is a meta-step which is present throughout the cycle steps. Thus, the monitoring not only controls the managerial processes, but also it is concerning to monitoring the learning process and synthesizing theoretical advancement.

For cases of AR Projects, these cycles can have different infrastructures or monitoring. From a university point of view, Avella and Alfaro (2014) show the infrastructure denominated “Busines Chair” and they explain that it is defined as an agreement between an university and an external organization (firm, association of firms, public institutions, other kinds of organization) to manage and finance activities usually related to teaching and research. Likewise, another case of AR Project infrastructure could be a doctoral thesis.

There are several studies about the use of AR methodology for developing doctoral thesis. Thus, Klocker (2012) encourage doctoral students and academics to develop thesis based on AR, while Zuber-Skerritt and Fletcher (2007) highlight the quality points for a thesis under this methodology. Likewise, Zuber-Skerritt and Perry (2002) explain the differences between participatory AR and AR applied to a thesis. Also, Nogeste (2008) points out the relevance of cycles for undertaking a thesis under AR. Finally, Coghlan (2007) presents the characteristics of a doctoral thesis with AR, when the student is a manager who is the researcher and the practitioner at the same time. Based on these studies, we can conclude that a doctoral thesis offers an adequate framework to develop an AR Project. We consider the next points as key reasons to undertake a thesis as an AR Project:

- A doctoral thesis is a rigorous space of long-term learning and research in which there are at least two researchers, the doctoral student and his thesis director, who must present periodic reports and results.
- This type of study has a similar structure to AR cycles, where diagnosing, action planning, action taking, evaluating, specifying learning and dissemination are natural steps of a thesis.
- Likewise it permits to integrate managers (the practitioners) into the research project. Hence, they participate, interact and better understand the research benefits. Furthermore, their attitude is more proactive and we get a continuous feedback during the process (Baskerville, 1997; Näslund et al., 2010; Ottosson, 2003).
- A doctoral thesis as an AR Project not only offers a specific case study in a company, but also it offers a long-term research space which could become a research line with further projects.
- Also, the AR Project methodology functions as an umbrella under which is possible to assemble

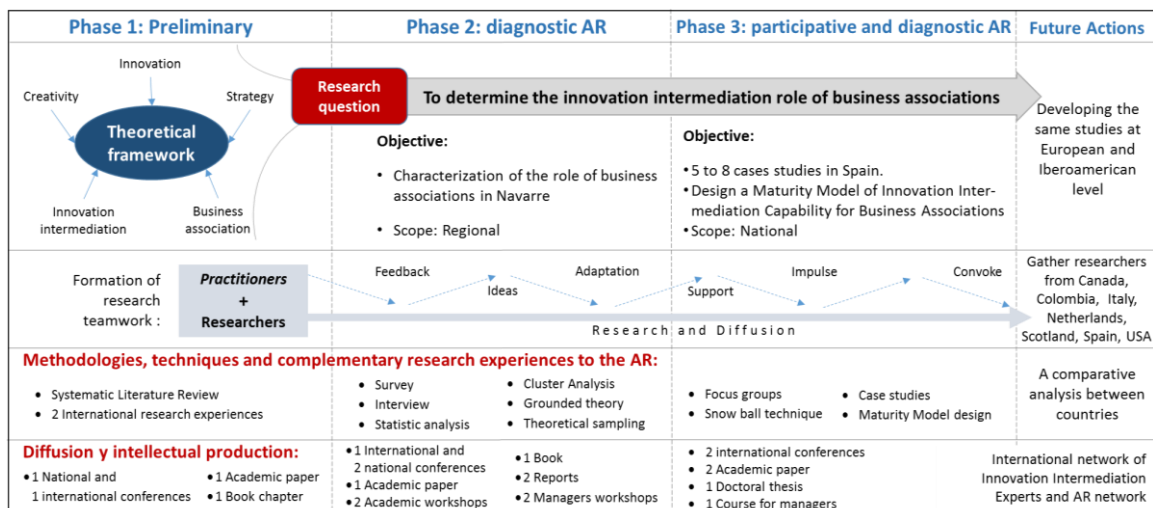
different research methodologies and techniques from a quantitative and qualitative origin.

- Additionally, this long-term relationship can be a source of different products as papers, conference papers, reports, books, workshops, etc.

The thesis that we are developing under this methodology is titled “The role of industry associations as drivers of strategic management of innovation in industry”. This study is managed by a research group whose goals imply projects with managerial findings as part of their final academic outputs. It is called “Innovation decisions in the business environment”¹ and it belongs to School of Economics and Business from University of Navarra, Spain.

According to our approach (see Figure 2) this thesis has three main phases as we show in Figure 3. First, we developed a “Preliminary phase” which permitted us to advance in the academic and managerial fronts. In the first front, we built a rigorous theoretical framework, we proposed the objectives and research questions, and we explored various research methodologies and techniques compatibles with AR. In the managerial front, we had the first encounters with managers and after that, we conformed the research teamwork between both groups, practitioners and researchers. The duration of this phase was one year approximately.

Figure 3. Example of a doctoral thesis as an AR Project



The second phase was a “Diagnostic AR”. It was centered in a specific project which pretended to determine the situation of a group of business associations as innovation intermediaries located in a northern region of Spain. This phase had a duration of two years and we obtained financing from a private bank foundation. As a general result, we presented a characterization of the role of 21 business association, through a statistical analysis and a cluster analysis. This latter permitted to us to propose a typology of business associations. To reach these results, we design a specific survey and a series of interviews with association’s managers. From academic side of dissemination step, we presented an international conference, a paper and we organized two academic workshops. From managerial side, we developed two reports for the

¹ <http://www.unav.edu/web/facultad-de-ciencias-economicas-y-empresariales/innovation-decisions-in-the-business-environment>

financing institution, two workshops with managers and a book (Alfaro et al., 2017). This book has been an interesting experience, because it combines academic and practical results, and managers consider it as a proof of the work consolidation between associations and university. They perceive it as the relationship formalization.

The last phase is currently developing during one year and it is a combination between a “Participative AR” and a new step of “Diagnostic AR” (see Figure 3). This phase is “participative” because we have more interaction with practitioners. Also, it is “diagnostic” because we are deepening our understanding of the association’s innovation intermediation role and its projection. Thus, we are designing a Maturity Model of Innovation Intermediation Capability for business associations, which is being validated for them through a focus groups and interviews with some managers. After, this model will serve as a framework for diagnosis of the maturity level and as a tool in order to determine the future steps to take for associations to grow as innovation intermediaries. It is planned to write among five and eight case studies about the maturity of innovation intermediation capabilities from associations. Likewise, for managers of associations and some clusters, we have prepared a course that collects all knowledge and experiences until this moment.

The future actions of this AR Project are undertaking similar studies in countries from Europe and American continent; developing a comparative analysis between them; gather researchers from Canada, Colombia, Italy, Netherlands, Scotland, Spain and United States through an international network of innovation intermediation experts and an AR network. To achieve this will be important to present and managing international projects, e.g. CYTED, COST or Europe Union Interreg projects.

Conclusions: lessons learned

The experience developing this doctoral thesis and managing this AR Project has taught us different key elements for a good performance on it. Consequently, we reflected and synthesized the following four lessons to undertake an effective AR Project.

Lesson 1: Collaboration based on trust and commitment between researchers and practitioners

One of the most relevant problems about AR is related to the personal relationships, and how to face and solve all the problems that can appear in the different stages of an AR Project. This question is even more relevant when it is usual to find researchers that have never worked in a collaborative way with firms, and managers that do not really know what academic research means. This lesson would be related with a factor that influences in the success or failure of AR Projects: how to manage personal relationships. Arieli and Friedman (2013, p.275) signal this as the “paradox of participation”, which is defined as “a situation in which action researchers, acting to actualize participatory and democratic values, unintentionally impose participatory methods upon partners who are either unwilling or unable to act as researchers”. This paradox implies other question: which are the skills that a practitioner and a researcher must have to participate in an AR? Our experience is that the attitude and the capacity of empathy to other viewpoints are crucial to avoid conflicts and solving with existing into the team group.

Two aspects we consider that are crucial to overcome this barrier that affects both actors: the first one, is the existence of an intermediary agent that is in charge of monitoring all the stages of the project. In our doctoral thesis, the role of monitoring was in charge of the supervisor of the Ph.D. student. It has been crucial that this person is an expert in developing AR methodology. Second, it is necessary to know the

main issues about personal relationships during the stages of an AR Project. In this sense, this is a topic that has been treated in the field of social research, but not so much in the management studies. In terms of our personal experience, we have developed good personal relationships with some of the managers of the 21 business associations. In the final stages, these ones were the most active practitioners in the research, this emphasizes the role of trust and commitment based on empathy and feelings between researchers and practitioners. According to Nooteboom et al. (2007), the cognitive distance (that is the difference that exists between the particular interpretation that two persons have about the world around them) is also a factor that influences the collaborative relationships. Hence, it is necessary a short distance between researcher and practitioner to reach a common view and a good understanding; but at the same time, it is required a certain cognitive distance to take advantage of complementarity between their two different viewpoints. The latter highlights the need of interdisciplinary as a way of exchanging experiences that permit understanding and dynamize the AR.

Lesson 2: AR Project is not an extended case study

About AR and cases studies, Baskerville (1997, p.42) explains their differences as follows: “Action research is more rigorous, more difficult, and longer in duration than participative case studies. For example, an action research report that fails to discuss (at least in an appendix) the client-system infrastructure, the collaborative nature of the research team, the iterative theory development (especially theory failure and modification) may be open to the challenge that the method has been erroneously described, and is indeed a participative case study”. Johansson and Lindhult (2008) also emphasize the role of AR as something more complex than case studies through the explanation of differences between critical and pragmatic orientations in AR. The first one is preferable where transformative action needs to be preceded by critical thinking and reflection. The second ones are well suited for contexts where the concerted and immediate action is needed. Most common is the pragmatic, which is linked to specific projects, meanwhile the critical imply analyzing a wide issue and, therefore, a long-term project that implies combining different methodologies, not only case studies. Most relevant for this classification is that “the responsibility of the researcher, as well as the form of knowledge developed, differs between the two orientations” (Johansson and Lindhult, 2008, p.95).

Though, we must go one step ahead, and asking ourselves: Is AR compatible with a survey research or implementing other quantitative techniques? The answer is “yes”, and as Towers and Chen (2008) foregrounds, the relevance of AR is based on the way that researchers and firms (practitioners) interact, and not so much in the research methodology that is used. The development of open innovation practices has to be a mechanism that helps to overcome the narrow view of AR as a case study or the misunderstanding with consultancy.

According to our experience, all these differences are based on that an AR Project represents a collaborative interaction, while consultancy expresses a cooperation dynamic. We agree with Miles et al. (2005) who express that collaboration of AR Project implies unpredictable results and relationships of commitment and trust. In contrast, the cooperation present in the consultancy means clear results and that parts act essentially by their own interest.

Lesson 3: Relevance of managerial results diffusion

One of the main issues to diffusion is that academic results are usually obtained in the medium-long term and the practitioner need to see the results in a short-medium term. It is common that researchers show the

results to the practitioners with the same tools than used with the academic diffusion. But, does a practitioner understand the content of a research paper? Not, because it is written for academic audience.

In the thesis/AR Project described in the previous section, we have seen that the meetings, workshops, training sessions, focus groups, reports and the book for reporting the results were valued in a very positive way by the practitioners. This means that it is crucial to develop specific and variates tools to transmit the results to the practitioners. According to this, it is very important that the results are explained in a face-to-face meeting because of two reasons: first, it permits to solve any questions that practitioners may have, and, second, there is a relevant feedback that is very useful. Moreover, it is important that the results diffusion is made during the different stages of the project and intermediate results can be as interesting and relevant as the final ones.

Lesson 4: Action Research Project as an Open and Collaborative Innovation practice

In the dynamic of open innovation agents from the company and external agents interchange ideas and knowledge through collaborative processes in which everyone shares and everyone wins. According to Miles et al. (2005), this interaction describes the collaborative innovation defines as “the creation of innovations across firm (and perhaps industry) boundaries through the sharing of ideas, knowledge, expertise, and opportunities”. Hence, Baldwin and von Hippel (2011) point out a project of collaborative innovation involves collaborators that share the design and the results of the work, openly presenting their individual and collective efforts for anyone to use.

Considering the previous paragraph, it is possible to interpret that an AR Project follows the same dynamic than a collaborative and open innovation project. Thus, this is characterized by interchange, openness, innovation, collaboration and long-term relationship between different parts. According to this perspective and take an account the study of Van Lente et al. (2003), the researchers become innovation intermediaries for practitioners, because their studies and research offer knowledge and solutions for their organizational problems, and sometimes, the academics link to them with other agents as chambers of commerce, innovation centers and government agencies among others. Likewise and curiously, the practitioners also become innovation intermediaries for researchers, because they bring practical information, specific situations and case studies for their intellectual work. In consequence, we affirm that an AR project is a practice of open innovation, and particularly, an expression of collaborative innovation because of benefits for both agents over time.

Talking about AR Projects implies to consider them collaborative innovation practices, which are a kind of practices within the open innovation. In that sense, von Krogh (1998) explains that the collaboration is a concrete type of open innovation whose particularities reside in that agents offer resources and different and complementary capabilities to the process of innovation; they orient themselves towards a mutually desired objective; the common interest prevails; often it implies unpredictable results; the grade of interdependence and interactivity among the collaborators is higher than in any other kind of innovation practice and, as a consequence, the success depends, to a large extent on trust and commitment to the values of honesty and equal treatment

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