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Initiating and managing career creativity of corporate professionals

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ABSTRACT

In this paper we advance the knowledge on the careers of corporate professionals within organizational context. The particularity of this category of personnel lies in their close links with their respective knowledge domains. Thus, in order to apprehend the career patterns for these employees, we have undertaken a detailed analysis of the developmental cycles of seven knowledge domains within industrial organization - a major international player in the energy sector. Based on our case studies we propose an analytical scheme that characterises the knowledge domain by two dimensions: the dynamics of its initiation and the level of maturity. This framework allows us to distinguish two types of career models: creative and institutionalized. Building on our empirical material we contribute to the debates on how the creativity appears within organization, by proposing to look at this dynamics through the lenses of roles and careers of corporate professionals. We also provide some insights into the managerial models supporting the successful functioning of these two types of careers.

Key words: career creativity, corporate professionals, expertise domain

Introduction

The corporate professionals represent the specific category of personnel within organizations. Their particularity is closely linked with a classical dichotomy between professional and organizational logics (Whalley & Barley, 1997).

Indeed, the occupations and organizations have remained for long time two separate worlds that interacted but not merged one with another. With the time the frontiers between the two logics have become less and less clear as the organizations became more complex and diversified. Following the need for specialized knowledge, that was historically the property of occupational groups, organizations have turned their attention to the professionals, trying to attract them for corporate work. This process has resulted in the appearance of "corporate professionals" (Barley & Kunda, 2006). Arriving to the organizational context with values and culture that corresponded more to the professional logic, this category of personnel would differ from the other employees of the organization by their specialized knowledge and close links with their respective knowledge domains. Their careers would be thus tightly connected with the developmental dynamics of the specialized departments within organizations.

The specialized knowledge of corporate professionals reserve them an important status of experts but also position them as possible innovators. However, there is little evidence on how the corporate professionals could initiate the emergence of knowledge domains within organizations and how this would impact their careers.

This paper aims at providing some empirical evidence in order to cover this research gap. We will first introduce different models of interaction between careers and organizations, by making a particular focus on the notion of career creativity (Peiperl, Arthur, & Anand, 2002). We will continue by defining our methodology and research settings. Based on our seven mini case studies we will propose the analytical framework, that will help us to conceptualise the processes of emergence and development of an expertise domain within organizations, viewed through the lenses of careers and roles of corporate professionals. We will finish by discussing the two models of careers – creative and institutionalized – and their implications in terms of management strategies.

1. Careers and organizations: the meeting point

Career is considered by scholars as a central concept, allowing to link individuals and organizations. As such, it contributes to the understanding of how stability and change can occur within organizational context (Jones & Dunn, 2007).

It has long been debated in the academic literature how organizations influence and structure the careers of individuals. A managerial view on career is usually articulated around the issues of career planning, evaluation, control, action planning (Poehnell & Amundson, 2002). This put in focus the creation of efficient models of people allocation to functions, projects, etc. according to the chosen strategy. Career managers within corporations and more generally within organizations are preoccupied by identifying typical paths and counselling employees within the borders of pre-defined career systems. Even if employees may have latitude in their choice (at least the initial one), they should refer to the existing norms and paths that could be limited and pre-determined by specific requirements and job sequences.

The paths of different categories of personnel will vary in their complexity, diversity and stability. For example, for the well-known category of "High potentials" companies will construct the paths that could be characterized by high internal mobility, the diversity of assignments and responsibility in terms of decision-making. This career model should allow them to develop critical capacities (from the company point of view) such as adaptability, efficient

decision-making and enlarged view on the different activities of the company. Thus, even for this privileged category of personnel the paths are predetermined and the absence of one or several experiences could put into question the career success.

Inkson provides the example of designing academic programs for a business school, where professors create certain number of prescribed pathways that students should follow in order to obtain their credentials (Inkson, 2002). The other possible paths through the differentiated sequence of courses are not supported and considered as risky. This inevitably creates the danger of losing "autonomy, creativity, individuality, and personal learning obtainable from the personal construction of one's own [...] path" (Inkson, 2002, p.26). It shows that "a very purpose and underlying design of companies mitigates against the prospects for creativity to occur" (Arthur & Peiperl, 2002, p.316)

Following the idea that the « career theory has predominantly developed in one direction », focusing primarily on how « host arenas shape individual careers » (M. Peiperl, M. B. Arthur, & Anand, 2002, p. 255) some scholars argued that the reverse process of how careers could shape and structure organisations remains quasi–unexplored (DeFillippi & M. B. Arthur, 2002; Higgins, 2002; Peterson & Anand, 2002).

Different scholars provided theoretical insights and empirical evidence of how creative careers shape fields, where field corresponds to the sum of organizations that perform within "recognized area of institutional life" (DiMaggio, 1983, p.148). Higgins explored how creative careers of executives became a starting point for the emergence of biotechnology (Higgins, 2002). Peterson and Anand show how the creative career of entrepreneurs reshaped the field of commercial music (Peterson & Anand, 2002). DeFillippi and Arthur, exploring the breathtaking career of Linus Torvalds, founder of Linux, analyses how creative careers shape the appearance of the community, then the company and finally the industry (DeFillippi & M. B. Arthur, 2002).

We can summarize that current research on the interaction between careers and institutions focus predominantly on the illustration of careers of leaders - executives (Higgins, 2002), entrepreneurs (Peterson & Anand, 2002), etc. - who initiated the creation of companies or even new industries by their innovative actions. However the understanding of how creative careers of technically and scientifically gifted employees – corporate professionals (Barley & Kunda, 2006) - would influence the strategic development of their organizations remains an under-investigated area.

Despite multiple studies on how individuals interact with their organizations or field, these observations are mostly descriptive and interpretative but providing no evidence on the possibility to organize and manage these interactions. These illustrations, apart several noble exceptions (Jones & Dunn, 2007; Peterson & Anand, 2002), describe either how institutions shape careers or how careers shape institutions. The knowledge of how both types of interaction happen within organisational context and, most importantly, how these interactions could be organized and which career models they produce remain undeveloped.

This paper addresses this gap by analysing different types of interactions between organizations and holders of particular technical knowledge. Drawing on seven case studies in a major oil-company, we propose the analytical scheme that explores the emergence and development of expertise domains by analysing the dynamics of roles and careers of corporate professionals. We then propose to elaborate on this scheme in order to see how the interactions between professionals and organizations could be organized and managed and which career models they produce.

2. Methodology and research settings

2.1 A collaborative research

According to the research question, an exploratory research design seemed appropriate. We adopted a method where the elaboration is not just a question of interpretation but also of codesign with a research field. A method of collaborative research (Hatchuel & David, 2007) was used in order to address the issues of managing scientific and technical (S&T) careers and took place in an international oil-company.

The specificity of the chosen method consists in a combination of theoretical perspective with a collaborative protocol. The collaborative research does not aim at having a planned impact on the organizations or testing theoretical hypotheses and existing frameworks (Hatchuel & David, 2007). It aims at creating new theoretical knowledge and at searching for possible solutions to managerial issues. The in-depth analysis of the situation and practices is needed in order to define in a collaborative way the possible ways of evolution, to choose the most appropriate ones, to guide and to advice on the implementation, and finally to evaluate the results (David, 2000).

2.2 Research settings

Our field work was done within a major oil-company, anonymized as OilCo, operating on the whole value-chain of gas and petroleum, i.e. from exploration to production, refining, petrochemicals and eventually distribution.

In April 2009, OilCo initiated a collaborative research with the author of present paper to obtain an exhaustive overview of the processes and practices regarding the career management of corporate experts and then to develop coherent managerial models and instruments.

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2.3 Data collection and analysis

Our two-step approach had a first phase of 9 months dedicated to a diagnosis of the situation and to the clarification of the issues. The second phase allowed a deeper analysis and elaboration of frameworks, managerial instruments/tools that could help addressing career issues and issues of expertise development in the firm.

During the diagnosis phase, forty-five interviews were conducted in the seven divisions and at the corporate level with specialists, experts, technical managers, HR managers and other organisational actors. Each interview lasted between one hour and a half and three hours. The interviews and documents were analyzed and a synthetic diagnosis was provided, discussed and validated at different levels of the company.

We then started a second phase from April to December 2011 during which we deepened the analysis of some research fields, and engaged elaboration with several specialized departments.

The findings are based on seven mini case studies in technical departments. These case studies were developed from detailed interviews within specialized technical departments and they articulate the individual and the organizational levels of analysis in order to understand how organizations interact with individuals in a dynamic career perspective.

3. Findings

In order to follow the evolution of a knowledge domain we have undertaken a retrospective analysis based on the detailed interviews with different members of professional groups (specialists, experts, department managers, new comers). We propose here the results of this analysis that are structured in form of seven mini case studies. For reasons of confidentiality we have codified the titles of expertise domains (ex. T, E, etc.)

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Case study 1: Domain T.

The domain "T" takes its origins in fundamental sciences but has also wide practical application, namely in engineering.

Luc arrived at OilCo after finishing his PhD thesis. The domain "T", in which he has specialized was not developed and not considered as strategic. Being passionate about his work and persuaded of the eventual benefits that the company could gain in case of further development, he started to develop his activity with a limited number of doctoral students. The results were impressive and the company became more and more attentive and receptive to the activity. He was allowed to create a small laboratory and recruit other professionals. Once the activity gained in notoriety and in number of people, he preferred to focus on the technical issues, that helped him to get significant results, performed impressive experiments and be considered as one of the best experts not only within OilCo but also on the international arena.

Case study 2. Domain E.

The activity "E" represents a recent field of knowledge that has been created by the need to improve already existing technology. The knowledge field has been unexplored until the time that the "E" activity was judged strategic to the development of the company. The top management has reviewed the candidates who didn't turn to management and stayed on the technical side, and the candidacy of Isabella was chosen to lead the development of the new technology. In several years the team has grown up to 14 persons (7 engineers and 7 technicians).

From the very creation of the team Isabella has been the Head of the department and assured both the technical side of the development of "E" technique as well as the managerial responsibilities. The administrative responsibilities (budget, contracts, etc.) were taking

approximately ¹/₄ of the time of Isabella without considering the time spent on the purely managerial tasks. Having both technical and managerial responsibilities but willing to pursue more specialized career path Isabella presented her candidacy at the Accreditation Comity, which has accorded her a status of expert.

It was agreed that in order to help Isabella to concentrate on the further development of technical expertise she should quit her managerial responsibilities. The later had to be given to Elisa, quite new in the department with the majority of her career done within another oil company. In this company she specialized in the same technique that has given her a chance to enter OilCo.

Another member of the team, Boris, 28-29 years old, is considered as a possible future expert of "E". In anticipating possible development of his career, Isabella and Elisa were trying to find the positions and roles that could help him to get to know different aspects of "E" expertise (short-time position at the subsidiary to get to know the operational part of the technique, another position in the research laboratory, etc.)

Case study 3. Domain N

Laurent was recruited after his PhD in "N" technique and started his career at OilCo within this domain. He had the potential of becoming a potential expert in the field, but soon after his recruitment OilCo has decided that it was no longer beneficial to develop "N" activity. Laurent was proposed the managerial position in charge of R&D team within another domain and after 3 years changed to the position of HR development manager. The domain "N" has thus dissapeared from the list of expertise of OilCo.

Case study 4. Domain S.

Following the strategic decision to develop new energies, OilCo acquires a young but already established and promising company, specializing in renewable energies – the leader of the market. At the moment of the acquisition, the company has already its own specialists and experts. Without any major change in the structure of the company, the latter should be integrated in the global organization of OilCo. The key expertise of the newly acquired company becomes one of the strategic expertise domains of the OilCo.

Case study 5. Domain R

The appearance of the domain is a result of the joint efforts of different professionals, who has met by chance and decided to work together on a specific project.

One of these professionals got inspired by the academic publications and has decided to test empirically the concept, proposed by an academic professor in the renowned university. The first investigations were held, without any knowledge of the possible results nor the exact objects of the research. However, the very first investigations have brought promising results and a postdoctoral student was invited to work on the project, guided by the professor who has first introduced the concept. Other people from different institutions have been also progressively involved in the project. Thus, a network of specialists and experts coming from different disciplines and varied horizons, have joined effort in order to develop the concept, without knowing exactly what kind of results to expect and what knowledge could emerge from this project.

After several months of experimentations, the project has been presented to the larger public during the annual meeting at OilCo and has received a particular attention not only from the colleagues and managers, but also from the representatives of other business units of OilCo. One year after, the company creates the laboratory in order to follow the development of this project and to initiate the new ones in the domain, thus recognising the strategic nature of the knowledge domain.

Case study 6. Domain M

Domain M is an established expertise field within OilCo. It is considered as strategic both by the company and internal clients. The requests for expertise, coming from diverse business units, are covered by a group of specialists and experts working within a specialized department. However, during an interview, a specialist working on a particular technology told us that he sees a growing need in developing this specific emergent field that could possibly be a replacement for the old established technology. And as for his career aspirations, he would like to become an expert in this field. He believed that this new technology could have a significant impact on a whole technological field and considered that one person is not enough to develop it properly.

Case study 7. Domain G.

This expertise domain has appeared at the border of two established domains. The domain has emerged following the initiative of several specialists of respective fields who felt the need to create the brige between two knowledge domains and develop collaborative tools that will advance significantly the joint work of two teams. The results were impressive and the management of OilCo recognises domain G as a new strategic knowledge field and decides to create a dedicated department, where the professionals of both domains will work together and become progressively specialists and experts of domain G.

4. Discussion

Based on these case studies we propose to conceptualise the processes of emergence and development of an expertise domain within an organization. The specificity of our approach consists in an analysis of expertise development through the lenses of careers and roles of the initiators and developers of the particular specialized knowledge.

In order to better represent this process, we propose to introduce two-dimensional scheme, where the expertise domain would be characterized by the dynamics of its initiation and by the nature of core knowledge. We distinguish for the first parameter the individual initiative and the strategic choice as two models of initiation of an expertise domain. For the second parameter we distinguish emergent and stabilized domains that provide us with some insights about the level of maturity of domain-specific knowledge within given organizational context.

Based on this categorisation we propose to follow the evolutionary path of each of the seven expertise domains within our analytical scheme, where the columns represent the dynamics of domain initiation and the lines – the level of maturity of core knowledge. We could thus distinguish four distinct quadrants that will characterise different stages in the progression of the knowledge domain and characterise the dynamics of the passages from one quadrant to another in terms of roles and careers of technical professionals. The symbol "star" represents the quadrant where the domain has appeared.

4.1 The evolutionary dynamics of the expertise domain

Domain T.

The domain T was initiated by a young specialist, who arrived in the company after finishing his PhD thesis. He quickly achieved significant results in the field and demonstrated the strategic potential of the domain. Thus, the domain initially appears in the quadrant 1. It passes afterwards to the quadrant 2, where the passage corresponds to the strategic validation by the company's top management. This passage brings the formal status and recognition of knowledge field as strategic. This recognition leads to the creation of the laboratory and the attribution of financial and human resources for the further development of the field. The quadrant 2 signifies thus that the nature of knowledge is still emergent but it is already recognized as strategic and demanding efforts of further exploration.

The passage from the quadrant 2 to the quadrant 3 is characterized by the stabilization of knowledge. In case of domain T this corresponds to the stage where the roles and their interaction become stabilized, namely concerning the responsibilities and the knowledge of each member of the group. With time the specialization appears and the roles could be differentiated one from another. Their evolution creates the trajectories of career development, which will become the reference career models for those who will continue within a domain.

Thus, quadrant 3 represents the stabilized domain, with formalized knowledge, which is recognized as strategic. The creation of the knowledge base for the domain was possible because of the distribution of missions between different members of the group and their role stabilization. New members could benefit from this knowledge base and build the learning trajectory in accordance to the present missions and roles.

Insert Figure 1 about here

Domain E.

Domain E appears directly in quadrant 2 and its initiation corresponds to the strategic choice of the company to develop knowledge that it considers as critical.

The necessary resources were attributed from the very beginning of the project, which was possible because of the initial formal recognition of the strategic status of the expertise domain. The entire department dedicated to the expertise E has appeared within organizational structure of OilCo.

Isabella – the person in charge of the "E" expertise – has also pursued an exploratory path, searching for the critical knowledge that will constitute future "E" domain. The emergence of different roles around Isabella made possible the redistribution of missions and responsibilities as well as the stabilization of knowledge (the reference people for each specialization are known, the knowledge has been formalized for more efficient management of expertise demands). This phase of stabilization, like in case of domain T., would correspond to the passage from the quadrant 2 to the quadrant 3. At the moment of our analysis, the E domain is already within quadrant 3 as a stabilized and recognized expertise domain, but it still needs to progress in order to develop its potential.

Insert Figure 2 about here

Domain N

The case of the domain "N" is a particular one. It appears directly within the quadrant 2 following the decision of the company to develop renewable energies. An expert is recruited to work on the project and to develop the knowledge field. However, the analysis of the profitability of the domain shows unsatisfactory results and the development of the domain as well as the investments were stopped. The recruited expert takes first the managerial responsibility in order

to develop R&D team working on other projects and, afterwards, change the career by taking the position of HR manager.

The domain thus disappears from the same quadrant 2, where it has appeared, without passing to the next quadrant. The further development of the domain was not possible, as it didn't pass the phase of strategic validation. This provokes the career change for the expert who becomes unable to pursue his career path as expert simply because the company doesn't offer any more the role of expert for this domain.

Insert Figure 3 about here

Domain S.

The domain "S" appears within OilCo following the acquisition of a "start-up" whose expertise was considered as strategic for a group. Thus, it appears directly in the quadrant 3 with the established system of roles and learning trajectories. The expertise is already recognized and established.

Insert Figure 4 about here

Domain R.

The evolution of the domain "R" takes different form from the other knowledge domains. It appears first at the quadrant 1 at the initiative of a group of specialists who decide to work together on a project. With the promising results from the experimentations it passes to quadrant 4. The first investigations allow to structure and formalize knowledge as well as roles and missions of different members of the group. With the further recognition of the expertise importance for the development of the company, the domain is currently on its way to the stabilisation and thus to quadrant 3, which corresponds to the strategically recognized and stabilized domain.

Insert Figure 5 about here

Domain M.

While the first five case studies provided us with some insights into the logics of stabilisation of the domain, the last two bring some evidence on how the renewal of a stabilized domain is happening within organizational context.

The domain "M" has appeared out of the stabilized domain where the roles are established and the knowledge already stabilized. This corresponds to the passage from the quadrant 3 which signifies the stabilized domain to the quadrant 1 which is an emergent initiative-based domain that will need to follow all the cycle in order to develop and stabilize newly created knowledge.

Insert Figure 6 about here

Domain G.

Domain "G" has appeared at the frontier of the two established domains. Feeling the need in collaborative tools, the specialists of both teams have decided to work together in order to link two complementary knowledge fields. With quite impressive results from this collaboration, management recognises the knowledge domain as strategic and decides to establish the specialised department. While concerned specialists previously worked within the established domains with formalized roles, this mobility brings them into the emergent field without clear role structure and formalized knowledge. Within our analytical scheme, this process corresponds firstly to the passage from the quadrant 3 to the quadrant 1, and, secondly, to the quadrant 2 which signifies the strategic validation of the domain.

Insert Figure 7 about here

4.2 Dynamics of interaction between careers and organization: the case of technical professionals

Coming back to the debates about the forms of interaction of individual and organizations, we would like to contribute to this long-lasting debates by providing some empirical evidence and structuring it with the help of our proposed analytical scheme.

As we have mentioned in the beginning of the paper, the issue of the organizations shaping the careers of individuals was long discussed. The career management strategy faces two challenges : firstly to successfully allocate people to projects, functions and missions ; and secondly to create a developmental logics of one's career. The main objective of the organization is thus to organize career paths and to formalize them in order to create the best learning opportunities by responding at the same time to the operational needs of the organization. As we could see on the example of the so-called « high potentials » - the future managerial elite of the company - their career paths are pre-determined in order to follow the logics of « getting the big

picture » of the company, by working in different departments for not more than 3 years at each position.

At the same time, while a lot of attention was given to the formalization of the career paths, the knowledge of how the individual careers could shape an organization remains much less explored. Some insights could be found in the description of the executives and innovators that have initiated the creation of entire fields or industries, but we have little evidence of how this dynamics happens within an organizational context and what are the roles and implications for the technical professionals and innovators in this process.

We could also notice that these two dynamics are usually analysed separately and are considered antagonistic. To the best of our knowledge, there was no analysis whether two dynamics could co-exist at the same organizational context.

Our case studies bring some contribution to these debates by analysing careers and roles of technical professionals and their way of interacting with the organizations.

Taking as a unit of analysis the knowledge domain and looking at its development through the lenses of roles and careers of technical professionals, we could distinguish two models of interaction of these individuals with their hosting organization : bottom-up and topdown.

In the **bottom-up** model, as it is shown in the cases of the domains T and R, the expertise domain appears as a result of an initiative of an innovative individual or a group of individuals. The cognitive investment and the perseverance of the leaders and initiators of new knowledge projects become the creative force and a necessary condition for the emergence of the new expertise domain. Although, in order to become recognized, the domain should at some point get the strategic validation from the company, which will ensure the support both in financial and human resources.

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In this model, *individuals will shape organizations* by creating new knowledge fields and thus having an impact on the structure and sometimes the strategy of the company. These creative individuals would usually lead the development of the domain either in a role of expert or technical manager.

In the **top-down model**, the creation of expertise domain is strategically planned. The company decides who could assure the role of the developer and assign the objectives according to the expected results. As the domain is considered as strategic from the very moment of its creation, the necessary resources are allocated and some control is usually taking place.

In our case studies we could distinguish three domains that were planned strategically. Firstly, that is the case of the domain E where Isabella was given the role of the leader to develop new expertise that later provides her with a status of expert. Secondly, the domain S which has appeared within the OilCo directly as an established expertise domain as a result of a strategic choice of the company. Finally, the domain N, which was also planned strategically, presents an interesting case. An expert was recruited in order to initiate the development of this new field. Although, as the strategic orientations have changed, the domain was no more considered as strategic. This had a serious impact on the role and career of the recruited person. The disappearance of the domain led to the disappearance of the possible role of expert. Thus, the person changed role and career, switching from the expertise career path to the managerial one. This example shows how the strategic choice of the company in terms of the expertise development could impact the roles and careers of technical professionals, in other words, how the <u>organization could shape the career trajectories of individuals</u> with a recognized technological potential.

While in the literature these two models are usually analysed separately or in opposition one to another, we show, based on our case studies, that both models (up-down and bottom-up) could co-exist within the same organizational context. Moreover, they are not antagonistic, as the strategic validation "from the top" is a crucial step in the developmental process of an expertise domain (as we could see on the example of the domain "T") and could play a critical role for the further development or non-development of the domain (as it was a case for the domain "N").

4.3 Creative careers versus stabilized careers

The second parameter that helped us to characterise the knowledge domain is the nature of the knowledge on which the expertise domain is based. We distinguish between the emergent and stabilized knowledge. This dichotomy helps us to uncover the processes of emergence and stabilization of the expertise domains viewed through the lenses of roles and careers of their initiators.

The literature on creative versus stabilized careers usually illustrates two general cases. Thus, either an individual follows the **creative**, **exploratory career**, which generates new knowledge fields, or the organization imposes the **structured career path** in order to assure the good functioning of the existent domain. In the first case the roles and missions are not stabilized and thus the career trajectory should support the exploration of unknown. In the second - the common knowledge base already exists in some form, which makes possible the definition of roles of the members of the specialized group. If a new member joins this group – he would be proposed to follow the career path that would first require the learning of the compulsory knowledge, already identified and structured. This learning trajectory would be characteristical to the established knowledge field, where unexpected knowledge has less chances to appear than in the emergent field for which any knowledge is in some way unexpected and unforeseen.

In our analytical scheme this corresponds respectively to the quadrant 1, which represents emergent field initiated by creative individual, and quadrant 3, which represents the stabilized field. Thus the quadrant 1 supposes the creative career model while the quadrant 3 - the stabilized one. In our scheme a diagonal between quadrants 1 and 3 represents this opposition.

Insert Figure 8 about here

However the example of the domain E (quadrant 2) represents an interesting case, which is absent in the usual interpretations of career models. Thus, even if the domain is planned strategically, the knowledge is not yet present and not stabilized. Thus the initiator of such a domain would have to follow an exploratory path in order to identify the necessary knowledge, evaluate its potential and structure different pieces into an organized field. Without any reference in terms of the learning trajectories, the career model could be characterised as creative.

Therefore, we show that the creative career models appear not only in case of individually initiated domain but could also take place in case of strategically planned domain. These findings show that the organization could have an important role not only in reproducing the existent knowledge but also *in shaping for emergence*.

As for institutionalized careers, we could also notice that the formalized career pattern could exist not only in case of strategically approved domain, but also in the "informal" domain, which has already a structured network of roles and relationships, but was not recognized yet strategically (the case of the quadrant 4). Therefore based on our case studies we propose the enlarged scheme of creative versus institutionalized careers.

Insert Figure 9 about here

Each type of career presents different challenges for management and thus requires a different managerial approach.

In case of emergent domain the organization should support the creative careers of the innovators, by creating the opportunities for exploration even if the latter supposes unconventional moves or change of role (for example, some phases of explorational learning could have place outside the organization – in external laboratories or institutions).

As for stabilized domain – the system of roles and career trajectories should be organized in a way to support the learning trajectory of the current members and new comers. The progression of each member will depend on the roles and careers of others so the understanding of how the whole expertise domain functions in terms of roles and careers will help to identify the best trajectories for its members.

We argue that for the successful functioning of the company – the two career models should be present and be managed according to their specificity.

But, ensuring the simultaneous management of both career types is not enough for a successful management of expertise. It becomes also crucial to manage the transformation of creative careers into the stabilized and vice versa.

Insert Figure 10 about here

First, as we have shown in our case studies, the stabilisation of the knowledge domain will pass through the stabilisation of roles and careers of initiators and other members of the professional group. This process initiates the appearance of the reference roles and career trajectories and thus transforms the creative career model into the formalized one. In a same way, in order to avoid the stagnation, it becomes also crucial to manage the reverse process of the initiation of creative career models out of the stabilized ones (as it was shown on the examples of the domains "M" and "G"). It becomes thus necessary to support the innovative career trajectories within the stabilized fields and to search for the eventual gaps where new knowledge could appear.

Conclusion

In this paper we discuss the careers of corporate professionals (Barley & Kunda, 2006) and their interaction with organizations. The particularity of this category of employees lies in the fact that they are closely linked to their knowledge field (in comparison with classical managers who could easily switch the domain of work because of the generalized competencies) Apart from the radical changes (for example, decision to follow the managerial career track), corporate professionals will pursue their career within their respective knowledge field. Therefore, we propose to look at the dynamics of the knowledge field through the analysis of roles and careers of this category of employees. Based on our seven case studies we propose an analytical scheme

that characterises the knowledge domain by two dimensions: the dynamics of its initiation and the level of maturity. With this two-dimensional scheme we conceptualise the emergence, the stabilisation and the renewal of the expertise domains.

Firstly, this conceptualisation helps us to define critical interdependences and to contribute to the debates on the models of interaction between careers of individuals and the strategy of organizations. While the literature is mostly focusing on how the organization could shape individual careers, the knowledge of how individuals could shape their respective organizations through their career was undeveloped. Based on our analysis of roles and careers of corporate professionals, we have shown that both types of interactions could exist within organizational context. Our empirical material allows us to distinguish top-down and bottom-up models of interaction. In the top-down model the strategic decision to create an expertise domain leads to the creation of new expert roles and thus new opportunities for career development. In the same way any changes in strategic orientations could impact the career path of the professionals as it was the case with an "N" expertise domain. In the bottom-up model the individual initiative becomes the creative force for the emergence of a new expertise domain, while the latter is not yet recognized strategically. The successful development of such a domain could have a significant impact on the structure and strategy of the organization.

Based on these two models we show two types of interactions of individuals with their organizations through their roles and careers. Taking the processes of emergence and development of the knowledge domain as a unit of analysis, we show how organizations will shape the careers of individuals by creating or eliminating the opportunities for specific career trajectories. At the same time we show how the creative individuals could shape the

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organizations by initiating the development of new expertise domains that could become strategic.

Secondly, we have distinguished between different levels of maturity of the knowledge domain. We argue that different levels of maturity will initiate different career models. Thus, if the domain is emergent and the knowledge is not yet existent within organization, the person will follow the exploratory trajectory without stabilized role and clear missions. He or she will need to determine where to find the necessary knowledge, how to structure it and how to ensure its further development. In this analysis we enlarge the field of creative careers by showing that the latter could appear not only in case of creative individuals who would occasionally create new knowledge, but could be also the case of strategically planned exploration of unknown (Le Masson, Weil, & Hatchuel, 2006).

The management team should be able to initiate and support this kind of exploratory trajectories by providing the conditions and necessary help for accompanying the innovator in his/her explorations. The simple attribution of financial aid is not sufficient in order to support this kind of projects. It will give "one-shot" results and will not ensure the long-term development of the newly created knowledge domain. Particular attention should be given to the exploratory trajectory itself. It is necessary to ensure that the latter is not contradictory with global system of careers, that the individual could progress in terms of his/her role and that there are clear opportunities for the middle or long-term period. The specialization as well as the project work with high level of uncertainty of final results could be dangerous for the successful career of the person within modern organizations. Thus, in order to ensure the creativity, it becomes necessary to be able to initiate and manage exploratory trajectories of innovators by providing them with the necessary resources, guidance and clear career opportunities linked with their exploratory projects (for example, by creating expert roles associated with newly created expertise domains).

This long-term view on roles and careers is supported by our findings on the developmental cycle of the expertise domain. Based on our empirical analysis we have shown that the necessary stabilization of domain passes through the stabilization of the system of roles and careers of professionals. Thus, in order for an expertise domain to become established, the creative career model will progressively transform into the institutionalized one, with the clear definition of roles, missions, with formalized knowledge and learning trajectories. At this point the managerial challenge would consist in the interpretation of interactional models of roles with each other, the construction of efficient learning trajectories and the development of critical competencies.

Therefore, depending on the level of maturity of the knowledge domain, the issues and strategies of managing specialists and experts would not be the same. It is thus necessary for the organizations to be able to manage both creative careers and stabilized careers. However the simultaneous management of these two career models is not sufficient. To ensure the developmental cycle of expertise within organization, it becomes even more important to manage the transformation of one career type into another. It is necessary, first, to ensure the passage from the creative career model to the stabilized one in order to ensure the stability and efficient functioning of the domain. But at the same time it is also crucial to ensure the renewal of expertise, by supporting innovative initiatives within stabilized domains, which could have a potential of becoming the strategic expertise domains of tomorrow.

References

- Arthur, M., & Peiperl, MA. 2002. Staying Creative about Careers. *Career creativity: Explorations in the remaking of work*, 314–332.
- Barley, S. R., & Kunda, G. 2006. Contracting: A new form of professional practice. *The Academy of Management Perspectives*, 20(1): 45–66. David, Albert. 2000. La rechercheintervention, cadre général pour la recherche en management ? In Albert; David, Armand; Hatchuel, & R. Laufer (Eds.), *Les nouvelles fondations des sciences de gestion*: 193– 213. Paris: Vuibert.
- DeFillippi, R. J., & Arthur, M. B. 2002. Career creativity to industry influence: A blueprint for the knowledge economy. *Career Creativity. Explorations in the Remaking of Work.* 298– 313.
- DiMaggio, P. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*.
- Hatchuel, A., & David, A. 2007. Collaborating for management research: from action research to intervention research in management. *Handbook of Collaborative Management Research*: 33–48.
- Higgins, M. 2002. Careers creating industries: Some early evidence from the biotechnology industry. *Career creativity: Explorations in the remaking of work*: 280–297.
- Inkson, K. 2002. Thinking creatively about careers: The use of metaphor. *Career creativity: Explorations in the remaking of work*: 15–34. Oxford University Press Oxford,, UK.
- Jones, C., & Dunn, M. 2007. Careers and institutions: The centrality of careers to organizational studies. *Handbook of career studies. Sage Publications*: 437–450.
- Le Masson, P., Weil, B., & Hatchuel, Armand. 2006. *Les processus d'innovation : conception innovante et croissance des entreprises*: 471p. Paris: Lavoisier.
- Peiperl, M., Arthur, M. B., & Anand, N. 2002. *Career creativity: Explorations in the remaking of work*. Oxford University Press Oxford.
- Peterson, R., & Anand, N. 2002. How chaotic careers create orderly fields. *Career creativity: Explorations in the remaking of work*.
- Poehnell, G., & Amundson, N. 2002. CareerCraft: Engaging with, energizing, and empowering career creativity. *Career creativity: Explorations in the remaking of work*, 105–122.

Annexes









Figure 5



Figure 6



Figure 7



Figure 8





Figure 10

Figure 9

