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A CONCEPTUAL MODEL OF CORPORATE ENTREPRENEURIAL BEHAVIOR

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SUMMARY

Principal Topic

In recent time corporate entrepreneurship has received valuable attention as an activity important for firms vitality (Dess et al., 2003). Nevertheless, the essence of corporate entrepreneurial activity has not been sufficiently clarified (Guth & Ginsberg, 1990; Kuratko et al., 2005; Stopford & Baden-Fuller, 1994). Stopford and Baden-Fuller (1994) call to pay attention to such questions as whether and how the attributes of behavior normally associated with individual entrepreneurs can infect the enterprise as a whole.

We engage in the discussion opened by these authors and address the question of *how* corporate entrepreneurs actually behave, hence contributing to a better understanding of the process of corporate entrepreneurship and its consequences for the firms where it takes place.

Method

First, we complete an extensive literature review focusing on entrepreneurial behaviors of individual employees. Based on this review, we introduce a four-category conceptual model of corporate entrepreneurial behavior. This model represents corporate entrepreneurship as discovery, evaluation, *legitimation* and exploitation of opportunities.

Second, we gather empirical data using the Delphi approach and asking well-known scholars of corporate entrepreneurship to suggest one or more cases with the focus on the project development and individual behaviors. Gathered cases then analyzed with the use of Nvivo. Initial descriptive categories are derived from the review. Further analysis is done by going back-and-forth between the cases and the framework providing specific and concrete examples of undertaken activities.

Results & Implications

First, the paper accumulates and synthesizes findings from research on individual and corporate entrepreneurship as well as different streams of literature on organizational behavior.

Second, a list of specific activities is derived from the cases analysis and compared with the list derived from the literature review, serving a better understanding of the nature of corporate entrepreneurship.

Third, our structured analysis reveals equal importance of legitimating activities on top of the three other (identification, evaluation, exploitation). This calls for paying more attention to the political and negotiating role of corporate entrepreneurs, and the position that they take towards the environment.

Keywords:
Corporate entrepreneurship, Intrapreneurship, Corporate venturing, Championing, Behavior

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INTRODUCTION

In recent time corporate entrepreneurship has received a valuable attention as an activity important for firms vitality (Dess, et al., 2003) that leads to organizational rejuvenation through implementing of novel ideas of employees. Indeed, a lot of studies focus on how being innovative, risk-taking and ready to pioneer can contribute to the financial performance and strategic value of firms (Covin & Slevin, 1989; Dess, et al., 1997; Lumpkin & Dess, 2001; Wiklund & Shepherd, 2005).

Still, most theoretical development and empirical research in the field tends to treat the organization as a black box (Monsen & Boss, 2009). Although a lot of work has been accomplished in discovering organizational factors supporting entrepreneurship within organizations (Birkinshaw, 1999; Burgers, et al., 2009; Hayton, 2005; Heller, 1999; Hornsby, et al., 1999; Hornsby, et al., 2002; Kuratko, et al., 1990; Marvel, et al., 2007; Morris, et al., 2000; Zahra & Covin, 1995), the essence of corporate entrepreneurial activity has not been sufficiently clarified (Guth & Ginsberg, 1990). Indeed, Stopford and Baden-Fuller (1994) refer to corporate entrepreneurship as an ill-defined term and call to pay attention to how the attributes of behavior associated with individual entrepreneurs can infect the enterprise as a whole. Hornsby et al. (2002) called that surprising that a systematic effort had not yet been undertaken to document and understand entrepreneurial activities of middle managers. Kuratko et al. (2005) once again highlight the necessity of such an effort.

Entrepreneurial behavior is generally and commonly defined as the discovery, evaluation, and exploitation of entrepreneurial opportunities (Shane & Venkataraman, 2000). Still, more investigation is needed to understand the specific actions behind the words discover, evaluate, or exploit (Kuratko, et al., 2005), especially in the context of an existing organization. Dess et al. (2003) suggest that we should examine and document the types of entrepreneurial activities in established corporations.

Therefore, we engage in answering these challenging issues: what are the practices of corporate entrepreneurs, and how do they affect organizations where corporate entrepreneurship takes place?

First, through an extensive literature review regarding entrepreneurial behaviors of individual employees this paper assembles a variety of activities associated with developing an entrepreneurial project within an established organization.

Second, in order to structure the vast body of literature relevant to entrepreneurship within organizations, a conceptual model of individual employee's entrepreneurial behavior is introduced. This model represents corporate entrepreneurship as discovery, evaluation, exploitation (Shane & Venkataraman, 2000) and legitimation of opportunities (Latour, 2005) and presents an attempt to assign certain activities to different levels within an organization.

Third, we analyze existing case studies of corporate entrepreneurial projects[3] in order to provide an empirical evidence for the discussion. We approach the analysis from two sides: we look at the frequency of different activities across different case studies and we pay attention to the level within organizational hierarchy, where these activities take place.

The paper aims to contribute to a better understanding of entrepreneurship within established organizations and allow better describing and observing such behaviors. We engage in the discussion opened by Dess et al. (2003) and Kuratko et al. (2005) and provide a

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list of specific activities that can be assigned to each of the stages. From scholar point of view it is necessary to unify the understanding of corporate entrepreneurship phenomena to be able to build on the findings of each other and to be able to outline and study in details specific aspects of corporate entrepreneurship. From a practitioner point of view firms that are interested in stimulating entrepreneurial employees should be aware of the tactics these employees use and the way they could influence the organization.

We conclude by a short discussion on the contribution and the limitations of the proposed model.

CORPORATE ENTREPRENEURSHIP: A SHORT OVERVIEW

Making a review of corporate entrepreneurship literature represents a challenging task: being a very broad concept it tends to be studied at different levels within organization, under different terms and from different perspectives regarding the outcome of the entrepreneurial process for the organization where it takes place.

Multiple levels of corporate entrepreneurship

Being a complex phenomenon corporate entrepreneurship tends to be analyzed at different levels, such as organizational, venture or individual levels (Carrier, 1996). Indeed, in the seminal article of Sharma and Chrisman (1999) most of the definitions belong to the organizational level, several – to the project level and only few have mentioned individual component of the concept (p.14-15).

At *organizational level* Ireland et al. (2009) propose a model of Corporate Entrepreneurial Strategy (CES), others address CE at organizational level as Entrepreneurial Orientation (EO) (Covin, et al., 2006; Lumpkin & Dess, 1996), Entrepreneurial Management (Brown, et al., 2001; Stevenson & Jarillo, 1990) and entrepreneurship as a firm behavior (Antoncic & Hisrich, 2003; Zahra, 1991; Zahra, 1993).

At the *venture, or project, level,* scholars aim to depict how venturing process unfolds over time within organizations from an idea into a final product (Abetti, 1997; Burgelman, 1983a; Burgelman, 1983c; Garud & Van De Ven, 1992; Vesper, 1984).

Individual level definitions of CE belong mostly to the early works on the topic and discuss the characteristics of entrepreneurial individual within organizations (Jennings, et al., 1994; Jones & Butler, 1992; Knight, 1989; Lessem, 1988; Luchsinger & Bagby, 1987; McKinney & McKinney, 1989; Pinchot, 1985; Souder, 1981). Behavioral definitions in terms of "what actually the intrapreneur is doing" are not that numerous (Ex.: Pinchot, 1985; Vesper, 1984).

This diversity of levels in defining corporate entrepreneurship results in confusion about the level of entrepreneurial initiatives within organizations.

In this regard Ireland et al. (2009) propose that entrepreneurial behavior might be observed at "organizational members' level" as opposed to the top management that is occupied by setting the vision of the organization. Contrary, entrepreneurial orientation approach suggests that it is in behaviors of top managers that organizational entrepreneurialness can be manifested (Covin, et al., 2006; Lee & Peterson, 2000). A series of works (Covin & Slevin, 1991; Hornsby, et al., 2002; Hornsby, et al., 1993; Ireland, et al., 2006a; Ireland, et al., 2006b; Kuratko, et al., 2005; Kuratko, et al., 1990) focuses on the interaction between senior and middle management. In his turn, Vesper (1984) postulates that entrepreneurial opportunities should be captured by individual subordinates from below in the organization, and that is consonant with autonomous behavior concept of Burgelman (1983b). Nevertheless, Day (1994) talks about the necessity and acceptability of both top-

down and bottom-up types of venturing, highlighting that corporate entrepreneurship might take place at both low/middle and senior/top management levels. Similarly, Lewin and Volberda (1999), Volberda and Lewin (2003) conclude from their analysis that according to the level of the initiative (top or middle management) different "renewal journeys" are possible.

This paper adopts a perspective of dispersed corporate entrepreneurship (Birkinshaw, 1997). This approach "rests on the premise that every individual in the company has the capacity for both managerial and entrepreneurial behavior more or less simultaneously" (Birkinshaw, 1997, P.209). Therefore, we are looking at behaviors within an entrepreneurial project deployed at several levels within organization, including both actions undertaken by inventors of an idea, those who bring it forward and those who reshape idea to provide the fit with organizational strategy and create wealth for the organization.

Multiple terms for corporate entrepreneurship

Another aspect of complexity is added by existence of two constructs: "corporate entrepreneurship" and "intrapreneurship". Amo (2006) proposes to differentiate between the two types of employee innovation behavior. For him intrapreneurship is initiated bottom-up by an employee to fulfill own interests, whereas corporate entrepreneurship is initiated at the top in order to follow organization's strategy and to increase its competitive advantage. This distinction resembles the discussion on bottom-up and top-down processes as well as the discussion on induced and autonomous strategic behaviors that exist for decades already (Burgelman, 1983a; Day, 1994). Nevertheless, the specific terms such as intrapreneurship or corporate entrepreneurship have not been strictly associated with them. In fact, often these terms are used interchangeably (Antoncic & Hisrich, 2001; Kuratko, et al., 1990; Parker, 2009; Pinchot, 1985; Russell, 1999) or even in the opposite sense (Davis, 1999; Nielsen, et al., 1985).

A nearby discussion concerns the status of this activity within an organization. As such, intrapreneurship (as autonomous strategic behavior) should be considered rather informal or even illegal, whereas corporate entrepreneurship, as induced by the higher management hierarchy, will take place within the formal procedures established within an organization. Nevertheless, some authors ascribe intrapreneurship to purely formalized activities such as those which receive explicit organizational sanction and resource commitment for the purpose of innovative corporate endeavors (Schollhammer, 1982). At the same time Zahra (1991) refers to corporate entrepreneurship as a combination of both formal and informal activities.

As the scope of the review embodies initiatives coming both from higher management and from employees, and also due to the lack of clear distinction between the terms, the review treats both concepts as synonyms.

Multiple outcomes of corporate entrepreneurship

Guth and Ginsberg (1990) propose to set apart two types of corporate entrepreneurship which differ by the nature of the outcome: one leads to the change *within* the firm (innovation and venturing), another – to the change *of* the firm (corporate renewal).

This paper focuses on the first of the outlined types that deals with processes occurring within the firm. Indeed, corporate renewal (1) involves different (whole-organization instead of within organization) level of analysis; (2) focuses on corporate change rather than individual behavior; and therefore does not provide the necessary input for the purpose of this review.

Further we discuss practices associated with innovation and venturing within established organizations.

Innovation stands for creating and introducing products, production processes, and organizational systems (Zahra & Covin, 1995), with emphasis on development and innovation in technology (Antoncic & Hisrich, 2001).

Venturing activities refer to creation of new businesses (new product lines and new markets) within firms using new structures, resources and opportunities that fall outside the purview of a company's base businesses (Verbeke, et al., 2007). More precisely, creation of formally autonomous or semi-autonomous business units or firms (incubators), corporate start-ups, and new streams (Antoncic and Hisrich (2001)).

Thus, even restricting the review scope to the innovation and venturing activities, corporate entrepreneurship still envelops a very heterogeneous terrain. Furthermore, as Zahra (1999a) notes – research on CV has not been fully integrated into CE domain and as a consequence, discussions on CE goes along with discussion on CV.

Definition of the scope of the review

This paper adopts a perspective of dispersed entrepreneurship (Birkinshaw, 1997), assuming that an initiative and responsibility might come from anywhere within an organization. More specifically it looks at behaviors of organizational members observed during an execution of an entrepreneurial project.

The paper treats corporate entrepreneurship (or intrapreneurship) as a combination of formal and informal, induced and autonomous activities of employees at all levels within an organization. Following Burgelman (1983a) and Antoncic and Hisrich (2003) we see CE activities as aimed at creating new business ventures, as well as other innovative activities such as development of new products, services, technologies and administrative techniques within established firms to extend their activities in areas unrelated or marginally related to the current domain of competence.

Aiming to understand the activities of corporate entrepreneurs and how they influence a broader organizational environment we further extend our review to include several potentially relevant inputs. First of all, we refer to the entrepreneurial core of the concept and discuss behaviors of individual entrepreneurs. In particular, we are looking at the sequence of actions undertaken in order to start a new business. Second, we look at corporate entrepreneurship as a part of organizational repertoire. As such, CE leads to entering areas unrelated to the current domain of competence and therefore needs to be accompanied by a substantial learning. Therefore, we refer to such aspects in studying existing organizations as development, evolution, and learning. Third, we address a corporate entrepreneur as a member of an organization. We look at relevant studies made within the domain of organizational behavior, more specifically – which organizational roles (as patterns of organizational behaviors) might be associated with developing innovative projects.

The following section describes findings from the core domain of intrapreneurship, corporate entrepreneurship and venturing, as well as several further sources of insight.

A LITERATURE REVIEW: WHAT CAN WE LEARN ABOUT BEHAVIORAL ASPECT OF CE
Corporate entrepreneurship, intrapreneurship and venturing literature

Following the discussion above, we address entrepreneurial behaviors of organizational members at different levels within organization. As such, we look closely at senior, middle and operating level management. More details can be found in the Table 1.

Top (senior) management entrepreneurial behaviors

Entrepreneurial orientation (EO) might be considered an appropriate construct to approach behavioral component of corporate entrepreneurship at the highest level of an organization (Ireland, et al., 2009; Lee & Peterson, 2000). An important insight can be obtained by looking at the paper of Dess and Lumpkin (2005), where they provide several "issues to consider" (p.153). A series of work on corporate entrepreneurship assessment instrument (Hornsby, et al. 2002) also refers to these issues. Their findings regarding the kinds of support higher management can provide to the entrepreneurial teams are consonant with those described by Dess and Lumpkin (2005) and with the findings of Brown et al. (2001) on Entrepreneurial management (Stevenson & Jarillo, 1990).

The role of top management may be described as providing the canvas for individual projects: showing where the innovation is crucial for the company, installing the structural boundaries of projects and providing the resources, limiting the new developments in terms of risk for organizational survival and reputation. That is in the dialog with top management that the new opportunities are shaped as fitting organizational strategy and thanks to the resources provided by top management that the new projects are exploited (implemented).

Middle management behaviors

Regarding middle management behavior two separate approaches are to be taken into consideration. As it has been noted by Zahra et al. (1999a), research in corporate venturing has not been fully integrated into discussions of firm level entrepreneurship. As a result, a more specific perspective describing new venture development is often differentiated from the general CE approach.

In respect to general CE approach Kuratko et al. (2005) outlined the following essential behaviors: endorsing, refining and navigating entrepreneurial opportunities through organizational bureaucracies and individual networks, as well as identifying, acquiring and deploying resources needed to pursue these opportunities. Some works propose other stages such as: project definition, coalition building and action (Kanter, 2004); or initiation, development and implementation (Zaitman, et al. (1973) and later Russel (1999)).

What is specific to CV activities is that they are often characterized by higher visibility and formality. As such, both Day (1994) and Burgelman (1983c) propose that giving a venture its impetus (gaining formal go-ahead from the organization) is a critical stage for this kind of projects. Day (1994) and Zott and Huy (2007) further argue for necessity to provide the venture with legitimacy internally and externally.

Both, CE and CV perspectives suggest that intrapreneurial actions are effectively performed in coordination with higher management activities that are carried out to support and champion entrepreneurial initiatives.

To generalize, the key role of middle layer is to help ideas pass into development. They are responsible for structuring ideas and communicating about their potential to other organizational members, they must also acquire the support of organizational champions to provide resources for further elaboration. As such, entrepreneurial individuals from the middle level might be willing to influence decision makers in order to reconcile the interests of disparate coalitional groups. The methods of influence represent a complex combination of bargaining and building trust and informal networks (Prasad, 1993). Together with some form of resource support the middle management layer is expected to ensure a core of committed people to coalesce around the idea and contribute to its continued evolution. Garud and Van de Ven (1992) suggest the trial-and-error nature of this evolution process that leads both to reformulation of the project's design, and to multiple refocusing of the new

venture's business model during its development. Implementation occurs after successful development and refers to incorporating successful new ventures as ongoing operations of the organization (Russell, 1999).

Additionally, looking at the studies of middle management entrepreneurial behaviors, few tendencies are to be reported. First, most of the studies focus on what has to be accomplished; rather than looking at what one is expected to undertake. Thus the emphasis is placed on the expected result rather than on the process.

Second, at this level of analysis scholars rarely discuss the question of how the entrepreneurial opportunities are being discovered[4]. As an example, according to Garud and Van de Ven (1992) the process of entrepreneurship starts with agenda setting (evaluating the technical and commercial feasibility of pursuing idea); for Hornsby (1999) the main focus is on implementing entrepreneurial ides – with or without official approval. As well, Pinchot (1985) stresses the role of an intrapreneur as the one bridging the idea and a successfully marketed product independent of the fact whether this person is the author of the idea or not.

Third, the literature highlights the interaction between different managerial levels. Still the levels are not clearly and unanimously defined. For example, some authors position champions of innovations at the senior management level (Hornsby, et al., 2002) whereas others – at the middle management level (Kuratko, 2007).

Operating level entrepreneurial behaviors

Entrepreneurial individuals from below in the organization are expected to undertake something new "without being asked, expected, or perhaps even given permission by higher management to do so" (Vesper, 1984). That is consonant with the definition of intrapreneurs as the dreamers "who do", who take hands-on responsibility for creating innovation of any kind within an organization; and who figure out how to turn an idea into a profitable reality (Pinchot, 1985). Kuratko (2007) expects operating management to come with ideas stemming from experimentation as well as to adjust and conform.

Nevertheless, the discussion on enterprising individuals often goes around stable psychological and cognitive characteristics that are expected to allow to differentiate them from the traditional management and the rest of the world (Alvarez & Barney, 2007; Davidsson & Wiklund, 2001; Gartner, 1988; Hayton & Kelley, 2006). As such works of Kirzner (1979), Gartner (1992), Gaglio & Katz (2001) and Alvarez and Barney (2007) present a range of individual characteristics relevant for exploration and exploitation of entrepreneurial opportunities. Some CE scholars also refer to these findings, assuming that the profiles of independent and corporate entrepreneurs do not differ significantly (Burgelman & Sayles, 1986; Carrier, 1996; Holt, et al., 2007; Hornsby, et al., 1993).

Several authors, though, focus on differences between corporate and independent entrepreneurs. Works of Antoncic and Hisrich (2003), Hisrich (1990), Morris (1994), Jennings et al. (1994) offer several insights that allow to differentiate between both individuals. They argue that the motives, time orientation and desire for status and autonomy of individual entrepreneurs may differ from those of corporate entrepreneurs (for an excellent work on motivations of corporate entrepreneurs, see Marvel et al. (2007). Recent studies also suggest an aspect of perception of ownership (Uhlaner, et al., 2007).

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[4] Here we mean both recognition and creation; it is not in the scope of the paper to discuss the differences between the two, for a review see Alvarez (1997)

For the discussion on behaviors of corporate entrepreneurs this brings two main consequences. First, a specific, potentially more complex, decision making process. Both Hisrich (1990) and Morris (1994) conclude by discussing the role of top management in supporting corporate entrepreneurs, championing their projects and ensuring that these projects would be aligned with the corporate strategy. Second, Shane et al. (2003) have shown that motivational factors such as desire for autonomy or vision as well as some cognitive factors may strongly affect the opportunity recognition, development and exploitation.

To conclude, the lower level entrepreneurs are expected to come up with ideas stemming from experimentation and problem solving, they are also responsible for creating innovations and conforming to the directions defined by higher level management. Although intrapreneurs may have a lot of similarities with the classic entrepreneurs, some authors suggest they might differ in terms of their motivations, cognitive characteristics and ability to make decisions regarding the venture they have proposed.

Enlarging the scope: related perspectives

Further we extend our review. We refer to the entrepreneurial core of the concept and discuss behaviors of individual entrepreneurs; look at corporate entrepreneurship as a part of organizational repertoire leading to development, evolution, and learning; and finally, we address a corporate entrepreneur as a member of an organization by looking at which organizational roles (as patterns of organizational behaviors) might be associated with developing innovative projects.

Insights from literature on individual entrepreneurship

Corporate entrepreneurial research has borrowed heavily from the "mother" domain at the initial stages of its development (Stopford & Baden-Fuller, 1994). Especially it is appropriate if we talk about such forms of CE as autonomous business units, skunk-works or incubators: creating a business entails many common core processes irrespective of organizational and industry setting (Liao & Welsch, 2008). The works of scholars working on this topic (Alsos & Kolvereid, 1998; Bhave, 1994; Carter, et al., 1996; Delmar & Shane, 2003; Lichtenstein, et al., 2007; Lichtenstein, et al., 2006) covered such aspects as: what activities are initiated, how many activities are initiated and when are particular activities initiated or completed. Their general findings suggest that a venture creation process embodies a common scope of activities, such as: write a business plan, gather information about customers and competitors, talk to customers, project financial statements and budgets, establish a legal entity, obtain necessary licenses and permits, secure intellectual property protection, seek financing, initiate marketing and promotion efforts, and acquire inputs (Delmar and Shane, 2003).

Also, similarly to new venture creators corporate entrepreneurs might need to engage in legitimating the novel ideas. First of all, because the ideas of corporate entrepreneurial projects lead organizations into areas "un related or marginally related to the current domain of competence", they, similarly to new businesses, lack the legitimacy, customers / suppliers relationships and productive routines that are readily available for established products or businesses (Delmar & Shane, 2004). Further, corporate entrepreneurs need to overcome existing socio-politic forces that resist the change within the organization. For example, regarding the procedures and routines to produce a novel product, rather than creating these routines *ex nihilo*, corporate entrepreneurs will be faced with *re-persuading* existing operating level managers to shift from the "business as usual" mind set.

Therefore, legitimating activity should be crucial for corporate entrepreneurs. Nevertheless, being embedded into a larger organization, their actions might differ in the way how they are performed. For example, Delmar and Shane (2004) discuss two legitimating instruments: establishing a legal entity and completing a business plan. This review shows that for the domain of corporate entrepreneurship, *more informal* persuasion methods are relevant. Another example, decision about creating a legal entity will most probably not be taken by the project leader, but rather by senior management team, whereas the activities targeted at obtaining licenses or patents will most likely be performed by devoted entities within an organization. The context will also affect the way the financial resources are gathered as well as the amount of them available for the project.

It is necessary to mention that some researchers argue against borrowing findings from other contexts than those of corporate entrepreneurship in suggesting appropriate strategies (Phan, et al., 2009). Still, the evidence presented above and consideration of the effects that might be induced by the context, we propose to use these findings as an additional input. To summarize, although the activities undertaken by corporate entrepreneurs and new baseness developers might be similar (especially in the case of a new business development for CV), CE activities might be subject to specialization (activities are performed by different departments within organization); overcoming rather than creating (that leads to negotiating rather than organizing focus), as well as necessity to legitimate their activities.

Insights from organizational sciences literature

The literature on organizational learning and renewal is extremely rich and broad. In this section we aim to point out several specific works which discuss aspects relevant to this discussion. Among them there are entrepreneurial learning (Dess, et al., 2003; Zahra, et al., 1999b); debates on the exploitation versus exploration (Crossan, et al., 1999; Jones & Macpherson, 2006; March, 1991) and ambidextrous organizations (Gibson & Birkinshaw, 2004; O'Reilly III & Tushman, 2004; Tushman & O'Reilly III, 1996); and the co-evolution approach (Lewin & Volberda, 1999; Mom, et al., 2007; Volberda, et al., 2001; Volberda & Lewin, 2003).

Each of these streams addresses the issue of how an organization could integrate both mainstream and new innovative activities. The organizational learning considers the issue from the perspective of new knowledge accumulation and institutionalization of individual practices at organizational level (Crossan, et al., 1999). The organizational ambidexterity looks primarily at the structural framework of solving this issue through mechanisms of coordination between novel and traditional activities (Tushman & O'Reilly III, 1996); or contextual framework (Gibson & Birkinshaw, 2004) that considers building a set of processes or systems to encourage individuals to make their own judgments. The co-evolution school (Mom, et al., 2007) approaches the issue by looking at multi-level interactions within organizations.

This stream of literature strongly argues for the interaction between the old and the new, between different levels of management and between an organization and its environment. Ambidexterity literature suggests that it is strategic priority of top level to define the balance between the old and the new. Learning literature suggests that whereas any level of management can be involved in intuiting about new ideas, management of middle level might be more than others involved in interpreting these new ideas for the organization. The role of top management here is conductive to stimulation of acceptance of new routines. Nevertheless, it should be noted that while knowledge acquisition and organizational routines' improvement might be a by-product of intrapreneurial ventures, building knowledge base, organizational memory and routines is not the main concern of intrapreneurship

(Antoncic & Hisrich, 2003). The co-evolution literature suggests a dialog between levels should be established: the renewal is only possible when either top or middle management agrees to take the lead in the renewal and the other party agrees to follow.

Insights from organizational behavior literature

Corporate entrepreneurship is not only an entrepreneurship within organizations, but also a type of organizational behavior. Therefore it is possible to represent it through specific lenses of organizational roles (as patterns of behaviors that others expect of individuals in a certain context (Floyd & Lane, 2000)). Among them authors outline visionary leaders, change agents and innovation champions (Carrier, 1996), knowledge brokers and gatekeepers (Cohen & Levinthal, 1990; Hargadon, 2002; Hayton & Kelley, 2006; Tushman, 1977), sponsors (Day, 1994; Garud & Van De Ven, 1992; Zott & Huy, 2007).

An *innovation champion* can be defined as an individual who informally emerges to actively and enthusiastically promote innovations through the crucial organizational stages, exercises the required social and political effort to galvanize support for the business concept among key stakeholders, creates internal acceptance of the new idea, and represents the venture to resource allocators to ensure sufficient resources are released for development (Howell & Boies, 2004; Howell, et al., 2005; Markham, 1998; Markham, 2000; Shane, et al., 1995). Aiming to understand the way project champions influence others, Markham (1998) conducted a longitudinal study of champions and their teams and has found that in spite of a wide-spread image of champions as inertia-fighters, the champions from his sample used rather cooperative tactics of establishing positive relationships with "target people".

Scholars have highlighted different aspects of championing. Day (1994) uses the term "champion" for the leader of an intrapreneurial project. Indeed, much of the scholar interest concentrates on the agency responsibilities and the leadership roles of the champion(s) (Greene, et al., 1999). Leadership might take place at the project as well as organization level. As such, Hornsby et al. (2002) and Kuratko (2007) address innovation champions at different (top and middle) levels. Further, Gupta et al. (2006) outlined several distinct types of champions: new venture creation champion, product champion, implementation champions as well as network champions. Howell and Higgins (1990) came up with a typology of product champions' behaviors.

The role of *knowledge broker* has extensively been studied within the literature on knowledge management (Todorova & Durisin, 2007; Zahra & George, 2002) and actor-network theory (Akrich, et al., 2002a; Akrich, et al., 2002b).

The primary goal of the broker is to access new sources of information and knowledge, transferring this knowledge and combining different sources, both existing and new (Hargadon, 2002). The behaviors associated with brokering deal with exploration of diverse knowledge domains and their recombination; learning and bringing new knowledge into organization; adapting and linking knowledge (as well as knowledge about resources) for novel problems; building activities that construct new networks around the emerging innovations and implementing ideas (Hargadon, 2002; Hayton & Kelley, 2006). This role is especially important if the information form the external environment is not easily translatable or is far from the on-going activity. This can lead to a specification of activity (Tushman, 1977). Therefore, in a single innovation project there might be several brokers coming from specialized fields.

Dess et al. (2003) define *entrepreneurial leadership* as establishing the conditions conducive to performance and social exchange. Authors argued that the CE leadership served to resolve conflicts between old and new priorities and that CE leaders actively engaged in

shaping the internal organizational context in ways that foster effective exchanges between all the roles. Gupta et al. (2004) synthesized findings from entrepreneurial, intrapreneurial and leadership literatures and came up with the following list of tasks: 1) framing the challenge that includes setting ambitious goals at the same time with limits of what can be achieved; 2) absorbing the uncertainty – creating the vision and burdening the responsibility for being wrong about the future; 3) path-clearing – negotiating within inside and outside environments; 4) building commitment and enabling the energy to accomplish the goals set; 5) setting limits to override the self-imposed ideas of limits by the team members. The authors also suggest that rather than being a team-oriented leadership, entrepreneurial leadership bears a high political load and is oriented on negotiating and path-clearing for the goal accomplishment.

Sponsoring is usually associated with activity of higher ranks within organization. *Sponsors* help entrepreneurs gain access to the resources they need for their ventures; ensure there is legitimacy and support for the project; provide advice and guidance to the venture on how to best proceed. Higher-level sponsors can use their power and control over resources to get the support necessary for the projects they value. The sample references here would be Day (1994) and Garud and Van De Ven (1992). Sponsoring is also associated with transformational leadership and therefore, can be referred to the works of Dess et al. (2003) and Gupta et al. (2004).

Each of the constructs described above stands for a specific domain of activity. For example, sponsoring is designed to have a clear orientation towards resource gathering, brokering and gatekeeping – towards working with knowledge and expertise, leadership – towards working with team.

Nevertheless, while sponsoring has a clear strategic orientation, championing is studied at both top and middle management levels. For example, Garud and Van de Ven (1992) highlight that a sponsor may become a champion in special cases. Other scholar works use the construct of champion to characterize business innovators, internal entrepreneurs, sponsors, change agents, technical and manager champions, and administrative entrepreneurs (Greene, et al., 1999). Similarly, knowledge brokering is recognized as cross-level intra- and inter-organizational activity that may have a domain specific nature.

Therefore, in large organizations the term "corporate entrepreneur" is becoming a collective image. Indeed, Hayton and Kelley (2006) state that different behaviors may be performed by one person (in a smaller organization) as well as by several persons (in a larger organization or project). This suggests scholars should focus more on the functions and behaviors included in this concept rather than trying to describe "who is an entrepreneur" (Gartner, 1989).

Discussion

This overview of works on corporate entrepreneurship at organizational and process levels has allowed creating the canvas for further discussion. As such top management is defining where the innovation is crucial for the company, installing the structural boundaries of projects and providing the resources (sponsoring). It is strategic priority of top level to define the balance between the old and the new, stimulate acceptance of new effective routines or limit new developments that present risk for organizational survival and reputation.

The key role of middle layer is to help ideas pass into development. They should articulate a vision, gain acceptance of the vision within the organization, and create

congruence between the vision and followers' self-interests. Middle level might also be more than others involved in interpreting the new ideas for the organization, transforming them into viable projects and leading till the final implementation or termination of the project. Additional perspectives (such as new venture creation) allow to look deeper into *how* these goals are being achieved.

The operating, or lower level, management within organization is expected by scholars to come up with ideas stemming from experimentation and problem solving. They also participate in adjusting the project idea by providing necessary services and expertise. They are also described as people creating the innovations, meaning that these are the people that find solution to the problems arising during the innovation development and implementation.

INTEGRATIVE FRAMEWORK

This paper aims to investigate the behavioral aspect of corporate entrepreneurship. Shane and Venkataraman (2000) described entrepreneurial behavior as discovery, evaluation and exploitation of opportunities. This conceptualization has received a broad acceptance both in entrepreneurial and corporate entrepreneurial literatures (Ireland, et al., 2009). Still, the approach of Shane and Venkataraman (2000) has been designed to describe the process of independent entrepreneurship. We have shown earlier that several potential consequences induced by organizational context may interfere in this process within large organizations and that legitimating of new activities played crucial role for corporate entrepreneurship. We further introduce legitimating to our framework in order to illustrate the argument about importance of missionary activity of entrepreneurs and their interactions with corporate environment.

To construct the framework we wrote down all the activities mentioned in the articles selected for this review (see previous section). We further assigned them to either of the stages described below (discovery, evaluation, legitimation, and exploitation). We also paid attention to the level of management that was associated with this or that activity. Table.1 provides more details on this topic. Figure.1 presents the framework by exploring in more details the interaction between different levels of management at different stages of venture development.

Within the framework *discovery* includes recognition of an opportunity based on the accumulation of the previous knowledge and an ability of a potential entrepreneur to see the new mean-ends relationships or new value in existing combinations of elements (Mitchell, et al., 2004; Sarason, et al., 2006; Shane & Venkataraman, 2000). As mentioned earlier, we believe, ideas might be equally recognized at any level of management within an organization.

For example, according to Lumpkin (2007), stimulating innovativeness, autonomy and pro-activeness is especially conductive for this type of entrepreneurial activity. As such, "duties" of top management level may involve monitoring trends and identifying future needs; setting strategic direction and vision of a "first mover" and effectively using an aggressive posture to combat industry threats (Dess & Lumpkin, 2005). They should also recognize strategic potential of ideas, create awareness of the need for the innovation and pay attention to empowerment of the employees. The latter would involve building a set of processes to empower and enable judgment and initiative; encouraging innovation, creativity & experimentation; installing compensation system based on the value added to the firm; and letting the requirements of the situation & the person dictate job behavior (Mom, et al., 2007).
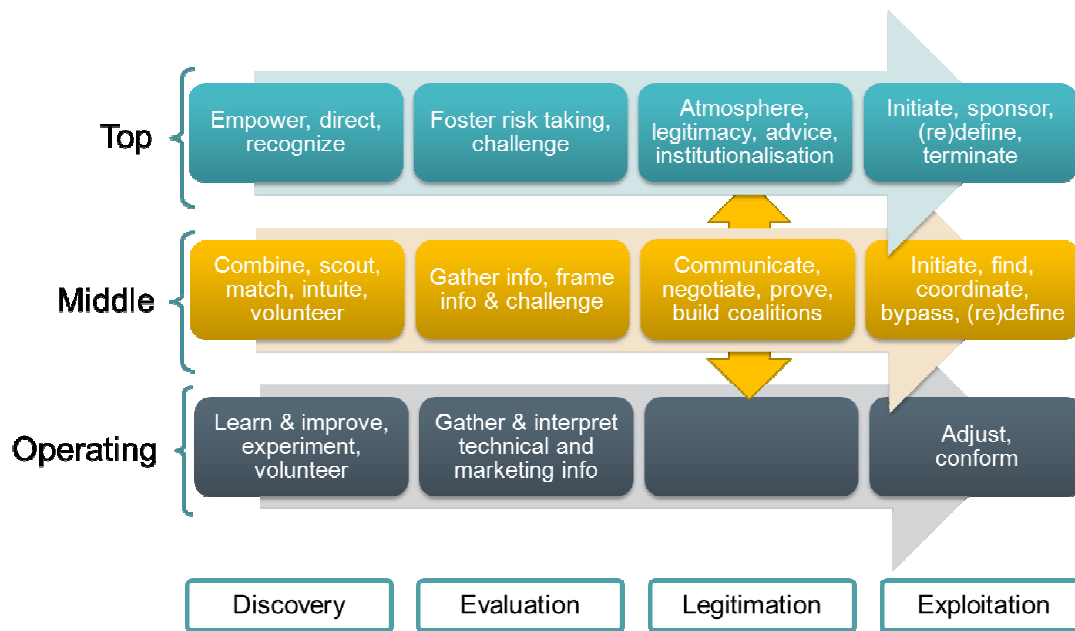
	Discovery	Evaluation	Legitimation	Exploitation
Top	Empower, direct, recognize	Foster risk taking, challenge	Atmosphere, legitimacy, advice, institutionalisation	Initiate, sponsor, (re)define, terminate
Middle	Combine, scout, match, intuite, volunteer	Gather info, frame info & challenge	Communicate, negotiate, prove, build coalitions	Initiate, find, coordinate, bypass, (re)define
Operating	Learn & improve, experiment, volunteer	Gather & interpret technical and marketing info		Adjust, conform

Figure. 1 Integrative framework

The literature highlights the role of middle management in scouting for the new ideas, combining old and new knowledge, finding new means-ends relationships (Floyd & Lane, 2000; Hornsby, et al., 2009; Kuratko, 2007). Operating level management is expected to be more problem-solving oriented – probably due to poorer overview possibilities (Floyd & Lane, 2000; Kuratko, 2007; Pinchot, 1985; Vesper, 1984).

Interesting though is that both middle management and top management roles are considered to be pro-active (future) oriented, whereas problem-solving rests at the operating level. How does this influence such initiatives at lower levels? Is that the reason why some authors highlight "maverick" nature of corporate entrepreneurship? Another interesting detail is that the project ideas are not supposed to come from the top management level.

The process of *evaluation* is focused on normative evaluation of an idea and its development into a valuable project that would be of compensating for the risk taking, uncertainty, time and effort of an entrepreneur. Evaluation might include assessing strategic, market, and financial variables such as risk, expected demand, industry profits, technology cycles, competition density, and the availability of population learning to conclude about the profitability of the future business (Mitchell, et al., 2004). From the literature we might also conclude that it is up to middle management to interpret the idea, formulate the project and frame the challenge for the team (Kanter, 2004; Kuratko, 2007; Russell, 1999). Expected to perform as "a good soldier", operating level management might participate in gathering and presenting specialized information about the product and the markets (Kuratko, 2007). Top level should commit to supporting a certain level of risk, thus providing some signals for middle level on how to structure, formulate and present the idea Lumpkin (2007).

Although the initial conceptualization implicitly assumed evaluation to be a one-time activity leading entrepreneur towards a decision whether to exploit the opportunity or not (Shane & Venkataraman, 2000), other authors have underlined the non-linear nature of entrepreneurial process and claimed evaluation to be an on-going activity which results in *legitimating* and the *idea development* (Sarason, et al., 2006).

The goal of legitimating process is to achieve *enrolment and to mobilize networks of people* (Akrich, et al., 2002a; Akrich, et al., 2002b; Latour, 1997; Latour, 2005; Morris &

Lancaster, 2006; Zilber, 2006). Legitimating envelops activities of the project leader in getting recognition and approval from other organization members and higher management. Operating level management does not seem to be involved in these activities. On the contrary, the top management level communicates the project in order to create the "right" atmosphere; it also provides credibility, advice and guidance, and ensures legitimacy and support for entrepreneurial projects as such supporting institutionalization.

Exploitation covers different action modes directed towards bringing the innovation to the market. Shane et al. (2003) also call this phase *execution* and describe as an activity related to the resource accumulation, organizational design, marketing communication and product development. Exploitation of the opportunity starts with a formal impetus from the top management if we talk about corporate venturing. Corporate entrepreneurial (innovation) literature highlights that an idea might be launched even without (before) an official approval (Hornsby, 2002). We also see that the interaction between top management and middle management levels become denser at this stage: it concerns providing and safeguarding resources, structural arrangements, mentoring and monitoring, providing expertise and advice; as well as terminating the project (at the level of middle management it can be answered by omitting kill orders and hiding the venture progress from the tops).

Although presented, at a first glance, as a temporal sequence, these activities represent dominant logics, accompanying the development of an opportunity (Venkataraman, 1997) and should rather be perceived as a logical sequence. Similarly, Bhave (1994) describes new venture as an iterative, non-linear, feedback-driven conceptual, and physical process. Gartner (1985), relying on the evidence from previous research, has offered a kaleidoscope model to view "enormously varying patterns of new venture creation". Studies of Delmar and Shane (2003), Carter et al. (1996), Alsos and Kolvereid (1998) have shown that depending on the number of undertaken activities, a number of possible sequences increases geometrically.

This analysis allows for a better understanding of the interaction between different levels of management during an entrepreneurial project development as well as scholar accumulated knowledge about these activities. At this stage, we see that the role of operating management in development of entrepreneurial initiatives has not been sufficiently explored by scholars. Further, the literature lacks clarity in defining the levels of management (top vs. senior, middle management vs. operating level management vs. individual intrapreneurs). Some scholars use different terms in their works (Hornsby, et al., 2002; Kuratko, et al., 2005). This calls for a further investigation of the issues highlighted in this paper.

EMPIRICAL ANALYSIS
Methodology

In this paper the empirical analysis is based on using case studies describing corporate entrepreneurial projects. Research using narratives is now starting to be recognized as a valuable input for entrepreneurship domain (Gartner, 2007). Still, to our knowledge, there is no common and robust methodology to work with narratives. We further describe the design implemented in this paper.

Data collection

The case studies were gathered by using a Delphi approach. According to Ziglio (1996) Delphi method is an efficient tool in gathering opinions of geographically dispersed experts, allowing to elicit and develop individual responses, avoid problems of group dynamics, and achieve a consensus in cases where the information is insufficient of not well structures.

First, we made a search for the case studies on corporate entrepreneurship using the database of ECCH (European Case Clearing House, world largest and most up-to-date

collection of management case study materials). The pool of case studies was then refined to include only those cases that reflected unfolding of CE (excluding corporate renewal) projects in time.

Second, the experts for the procedure were chosen among well-known scholars of corporate entrepreneurship, publishing in top journals, who were currently involved in teaching corporate entrepreneurship in leading MBAs.

The *evaluation* procedure had two rounds. First, all experts received an email with a description of the purpose of the study and a short preliminary list of cases to help defining the scope of the search. They were asked to have a quick look at the list and add the cases they considered essential, but which had not yet been on this list. In the second round, a list containing all the responses was sent to all experts, asking them, whether they had additional insights or objections regarding the findings.

Out of the contacted 11 experts, 7 answers were collected in the first round (64% response). In the second round one more reply was obtained and one of the participants replied suggesting additional cases.

This number is close to the recommended sample size of between ten to fifteen people for a homogeneous group (Delbeq, et al., 1975). These authors have also suggested that a two or three iteration Delphi is sufficient for most research.

After the two rounds of survey, 52 cases were suggested for the analysis. Out of them we were able to select 21 that described development of a corporate entrepreneurial project (see Appendix.A for the list of cases).

Data coding and analysis

To uncover the essential features of the cases and to outline the generalizable features among them, the obtained case studies were coded using NVivo8, a computer-aided text analysis software program, to identify the emerging themes. This software program enabled us to systematically organize and code the data.

The coding procedure was based on the analysis of the literature on corporate entrepreneurship process. Excerpts from texts were assigned to one or several types of activities as defined by the framework (see Fig.1). In order to avoid being limited by the insights from the literature, we grouped the activities into "clusters". As such, searching for political, technical or market information would be labeled as "searching for information". If an activity could not be assigned to any presented in the table, it was coded as "invivo" and kept in the coding framework. The identified activities from all the contributions were grouped and discussed around four stages assumed by integrative model. Activities that were coded as "others" were either assigned to one of the four categories, or left beyond the framework. Samples of coding procedure are presented in Appendix B.

This structured analysis enabled us to identify cross-case patterns and differences. In our analysis we focused on the unfolding over time of the activities undertaken by employees and directed towards development of a new process, product or business within an existing corporation. This included, for example, volunteering for development of an idea, persuading management, gathering finance etc.

Findings

The general findings have underlined once again the importance of the legitimating activity of middle management in order to bring the project towards implementation. Additionally we have seen that although the process of developing an opportunity into a service or a product is not a linear one, the activities of discovery, evaluation and exploitation can still be

characterized The cases that we have analyzed support as well a highly interactive nature of corporate entrepreneurship. They witness as well frequent changes of project leaders or champions. The cases allow showing that with the evolution of the project, the project leader may be promoted to a more senior position and thus change his or her role in the project. The types of behaviors most frequently cited for each of the activities (discovery, evaluation, legitimation, exploitation) are presented on the Figure.2.
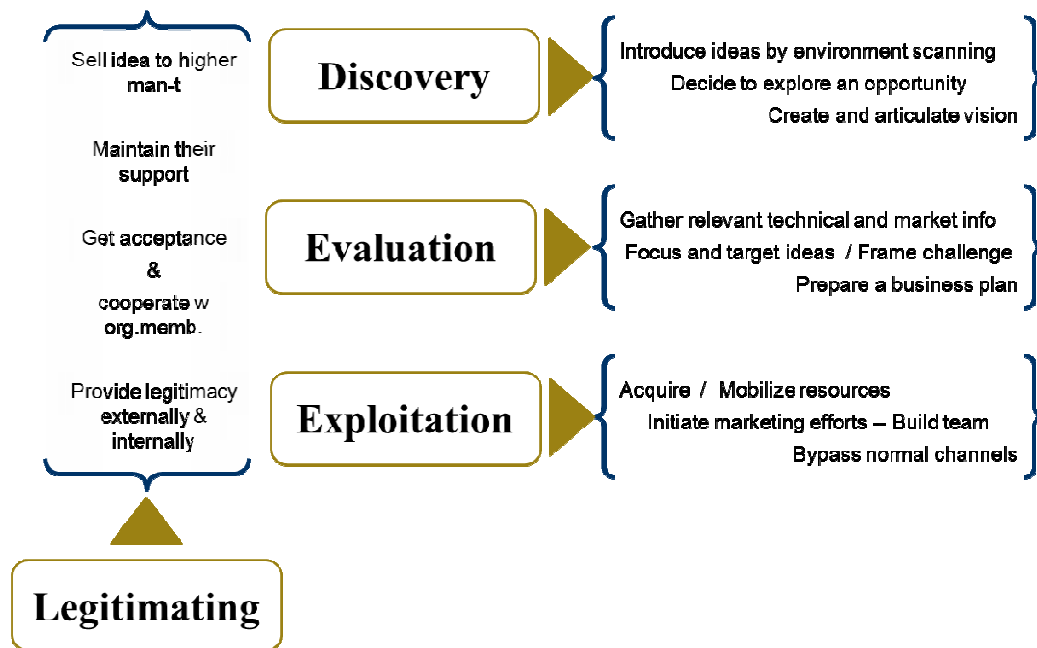

Figure. 2 Most frequently cited activities

Discovery

We have split the activities associated with coming up with an idea into two categories: *opportunity or idea driven* and *necessity or problem driven.*

The analyzed cases have shown that opportunity driven projects can arise as visionary, though flaky concepts (ex. Cases 13, 17) and come from external experience and be developed using the knowledge and opportunities provided at work. The ideas arising at this stage can be described as "visionary" and are subject to the refinement and refocusing during the later stages of their development. The problems can be of work-related nature and arise internally within company (ex. Case 18)

Several interesting ideas emerged from the analysis. The first two ideas were associated with opportunity-driven projects: the first one is a pre-discovery decision to search for an opportunity or to explore an already discovered opportunity. The second one is volunteering to participate in a project or to develop an opportunity additional to the existing job. The third idea was more oriented at problem solving and concerned projects born from identifying new means-ends relationships. This origin of ideas is often mentioned in entrepreneurship literature, but is rather rare in CE field.

Interestingly, most of the ideas cited in the cases have arisen as "opportunity-driven". This suggests a rather future-oriented logic of the projects described in the case studies that have been selected for describing corporate entrepreneurship. Does this tendency reflect the bias of case writers towards a more pro-active nature of corporate entrepreneurship? or Does it mean that the organizations underestimate problem-solving initiatives as a potential source of entrepreneurship within their walls? One of the potential explanations of this fact could be linked to the nature of entrepreneurial projects described in the cases: most of the cases

describe the ideas born at the level of Division leader or Head of the department. Therefore, according to the literature, the ideas coming from these senior levels should have a more future-oriented nature.

Further, contrary to some literature suggestions (Vesper, Pinchot), our sample of cases has not provided any evidence for what is called "involvement with other departments". This type of activity symbolizes the idea that new projects may start in order to help other departments or as a result of collaboration of several departments. Quite opposite, "thinking about work-related ideas" was more often focused on the own department (ex. Case 8). Co-working was more emphasized on the later stages of opportunity development.

Several reviewed studies reported that the intrapreneurs could rely on their multifunctional background within organization (such as different functions on the career ladder or trainings) (such as Case 3), significantly high or crossroad position and own proactiveness (ex. Case 18).

Regarding the level of the initiatives, roughly speaking we could assign cases to three categories: "top-down" – when a vision of top management was realized in a project, for which a leader was chosen among employees (9), "bottom-up" – when an idea came from a non-management, or a lower-level management employee (3), and middle-up – when ideas stemmed from a middle level manager (head of department, division) (9). Interestingly, in two cases the ideas were suggested to the management by external consultants invited to evaluate potential strategies for development. These ideas were then down-streamed to the middle levels by the top management. All in all such functions of top management as empowerment, recognition or direction were mentioned in half of the cases.

Evaluation

This activity is directed towards evaluating, focusing, and formulating the initial idea so that it would fit internally to the strategy and capabilities of the company as well as the personal vision and ambitions.

This stage has been split into two major blocks: *gathering information* and *framing the opportunity*.

Reviewing the cases we found support that intrapreneurs actively engage in gathering relevant *technical* (needed for development of the idea) and *market* information. At the same time, only 6 cases out of 21 reported gathering *political* or *insider* information to develop a project. We believe that this might be due to a prior availability of such knowledge for the entrepreneurs. A low frequency of mentioning this activity might also be a result of its intangible and sensitive nature.

Another type of activity that emerged during the analysis concerned getting *feedback* from the customers. Elements that were coded into this item considered active participation of an intrapreneur in getting a feedback of potential customers to develop the product or to focus the idea. Two other activities are related to the acquisition of skills that an entrepreneur needs to develop an idea into a project. These are "*pairing up*" with someone who possesses of a necessary expertise or a skill (such as writing a business plan or dealing with human resources) or *learning* (such as learning a language or how to set up a web-commerce portal).

During the analysis we explored deeper the nature of "*framing the opportunity*" and split it into separate categories: create and articulate vision, prepare a proposal or prepare a business plan. The difference between a proposal and a business plan is in the profoundness of the estimations and forecasts. Also, these two documents serve at different stages of the

project development: as described in Cases 11, 13, 16, first a draft proposal is submitted to the management, then – a more profound plan is introduced.

The evaluation activity has mostly been assigned to the middle management level, the standard phrasing to describe it would be "Manager with his/her team evaluated the…". Several cases report the names of the operating level collaborators if they would be promoted further to take a more senior position and influence project development at some later stages. The role of the top management at the evaluation stage differs depending on the level of the origination of the idea. For example, in the Case 10, where the idea was originated by the Top level, the management had been highly involved in its development. On the contrary, in the Case 16, the Steering Committee created for the project played rather "a brainstorming" function, rather than any other.

Enrolment and legitimation

This activity is aimed at communicating the ideas and making them accepted as novel and promising. Indeed, we could identify five general sub-steps: *communicate* the project, *negotiate* for the project, *build* (horizontal) *coalition* with colleagues and other divisions, build (vertical) coalition by *selling* the idea to the *management*; fifth category emerged through case analysis and related to *proving the credibility* of the project and *fighting the concern*.

The three most cited activities were: get acceptance and cooperation from organizational members; sell idea to the higher management and maintain their support, and provide legitimacy internally and externally.

Markham (1998) had studied the practices of innovation champions and found that they were using cooperation techniques. Our study is consonant with these findings. Only one study reports rules-breaking behavior of intrapreneurs (Case 20). The cases that report breaks in collaboration with other organizational members (e.g. Case 5 and Case 13) are the examples of the projects that failed. The question, therefore, is whether the image of an entrepreneur as a maverick and a lonely hero that comes up with an initiative even without being asked to and in order to fight organizational inertia, has evolved since these descriptions were proposed (Pinchot, 1985; Vesper, 1984).

To conclude, this study has identified two dominant modes of action employed by middle level intrapreneurs: the first one consists in taking responsibility for the promoted vision (by putting own reputation at stake), the second – in establishing positive and cooperative relationships within organization. These two types of activities provide a useful insight into strategies used by corporate entrepreneurs, who are most commonly associated with revolutionists or even mavericks.

Exploitation

This activity refers to the concrete modes of action aimed at exploiting the opportunities. It is focused on getting and mobilizing resources needed to pursue the idea.

A very broad range of activities can be seen here. From the literature we derived four basic blocks: impetus/*initiation* of the project, gathering *resources* (also human), *coordinating* the project with the rest of the organization, *bypassing* procedures. Three further categories emerged from the cases analysis: *redefinition* of different project aspects; constant *monitoring* and ensuring the progress and *building* the capabilities.

During the analysis we outlined two different modes of resource gathering: formal with request for budget from management (called acquiring resources) and more informal, mobilizing and shifting of resources. Both are extensively used by intrapreneurs.

Additional to the activities described in the literature and presented in Table.2 we identified multiple redefinitions and refocusing of the project during its development. It also concerns the necessity to adjust project to new "home" department (should the project be moved) or to the new management (should company go through restructuring before the project matures). These structural decisions are initiated by the top management level.

Redefining of the project (its business model or product bundle) may as well be initiated by the project leader (middle level). In this case the refocusing occurs as a reaction on the feedback from the market and other environmental influences. It is often reported that the project leaders engaged with potential clients directly, while the team (operating level) would be working on the technical details of the product.

Although sometimes recognized as a tribute to the early stories of intrapreneurship, obeying the management veto and hiding of the project's progress from management have been identified by the study (e.g. Case 4 and Case 20).

Three cases (Cases 5, 7, 12) reported that intrapreneurs were seeking a legal protection – that is one of the items not commonly associated with corporate entrepreneurship.

The last of the activities emerged through analysis of the cases was called "building internal capabilities" – to this category we assigned such behaviors as discussing and coaching new people in the team, patiently letting engineers grow their familiarity with the domain before the envisaged product development started etc.

These findings provide a possibility to compare the process of the business-as-usual with entrepreneurial development and pose questions whether organization is ready to provide confidence to multiple redefinitions and reorganizations of the project, as well as whether the people within this organization possess of the capital to build internal capabilities and coalitions.

Discussion

Finally, this analysis has shown that most of the activities corporate entrepreneurs are expected to engage in (see Table.2) can be assigned to one of the four dominating activities which are discovery, evaluation, legitimation and exploitation. That is indirectly supported by the fact that all but one emerging activity could have found home within the *integrative model* proposed in Section 3.

One major theme that was not assigned to any of the stages was considering the _termination_ of the project: cancelling, selling, re-integration into the parent organization. On top, we can assign here the consideration of an entrepreneur to quit organization. This situation would normally arise as a reaction on the inability of the firm to understand the potential of an idea or of the entrepreneur. Five cases reported this situation. In terms of observable activities this could be translated as "staying with organization", but it remains unclear, which stage could envelope this decision.

A general challenge that arose during the analysis concerned multiple leaders of an entrepreneurial project: several cases reported that one project could be led by different people throughout its development. Aiming to uncover all possible practices associated with corporate entrepreneurship, we considered all activities undertaken within a case as contributing to the model. Still, other opinions are possible.

On top, the analysis has shown that corporate entrepreneurs actively work with external environment and knowledge, transmitting it among organizational members, fostering

exchange between internal and external contributors. They pair up with missing skills or knowledge, let grow internal capabilities of the team and the project, educate potential customers. It provides a useful insight into *how* intrapreneurs develop their projects. One more element into this puzzle is added by looking at the political or ambassador activity of intrapreneurs: all the practices suggested by the literature as enrolment or legitimation practices could be found among case studies. These practices, though, have been gathered across a broad range of disciplines and this suggests indirectly that a general discussion on corporate entrepreneurship might oversee these behaviors.

CONCLUSION
Contribution

This paper makes a number of contributions to the existing research.

First, our review of the literature within the field of corporate entrepreneurship has found only limited systematic research devoted to the behavioral issues of corporate entrepreneurship. While several authors have already paid attention to unfolding in time of corporate entrepreneurial projects (Burgelman, 1983c; Day, 1994; Russell, 1999; Shane, 1995; Shane, et al., 1995), the findings regarding behavioral aspects still appear to be quite fragmented.

Second, this paper presents an attempt to explore which activities, i.e. specific manifestations of entrepreneurial behaviors (Ireland, et al., 2009), could be regarded as essential for corporate entrepreneurship. The paper accumulates findings from research on corporate entrepreneurship in general and corporate venturing in particular. To bring an additional insight into the core of entrepreneurial process it resorts to the findings from the research field of independent entrepreneurship as well as wider debates in organizational studies.

The findings are analyzed around four main phases of an entrepreneurial project development: discovery, evaluation and exploitation of entrepreneurial opportunities (as introduced by Shane and Venkataraman (2000)) and their legitimation within and outside organization (Latour, 2005; Aldrich and Fiol, 1994). Further, behaviors are represented at different levels of management. This allows exploring in more details the nature of interaction between operating, middle and top management levels during an entrepreneurial project. Such a representation highlights several questions that might become subject for further research.

Limitations and further research

This paper in its first part has offered a literature review on how an entrepreneurial process can be seen from perspectives of different theoretical streams. Still, other potential approaches might be applied and future research might describe an intrapreneur in a wider environment including industry or country level, for example. Such a perspective could also shed light on the national specificity of corporate entrepreneurial tactics as well as it would allow to account for the influence of culture (see, for example, a work of Basso, et al. (2007)).

One of the limitations of the paper is that the "translation" of findings from different levels within organization was used. Such an approach might lead to subjective conclusions and needs to be verified by an empirical investigation.

The paper has also defined its scope in rather narrow terms, excluding such aspects as strategic renewal, intrapreneurial learning and fostering, focusing on the events taking place during one corporate entrepreneurial project. Nevertheless, the interaction between an

intrapreneur and his/her environment is not limited to this timeframe and may develop over time (Shephard, et al. 2010). Studying these aspects might shed more light on the tactics of corporate entrepreneurs and the way they do influence their organizations.

Although preliminary and exploratory in nature, together with the findings of Delmar and Shane (2003) and Howell and Higgins (1990) this analysis suggests that creation of a typology of intrapreneurial behaviors within organization could become another aspect of further work. This could contribute to our understanding of specific contexts supportive for different patterns of behaviors (Hayton & Kelley, 2006) as well as for the purposes of intrapreneurial education (Thornberry, 2003).

Another important aspect is that while described as sequences of actions or stages, patterns of behaviors do not assume entrepreneuring to be a linear process. The non-linearity of the entrepreneurial process and a so called trial-and-error nature of entrepreneurship make it difficult to test the existence of a pattern on a large scale sample (Liao & Welsch, 2008; Reynolds & Miller, 1992) and therefore call for other research approaches to be used. As such, Garud and Van de Ven (1992) call for the necessity to use a process study approach: how do the corporate entrepreneurial activities unfold over time in the development and exploitation of the ideas. In this sense studies like Delmar and Shane (2003), Alsos and Kolvereid (1998) can serve as an inspiration from the independent entrepreneurship literature that can be adapted by the students of corporate entrepreneurship aiming to define the patterns of corporate entrepreneurial behaviors and follow their unfolding in further research.

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Scope	Sub-Scope	Concept	Works	Management level
CE literature	Organization	**Entrepreneurial orientation**	Covin and Slevin 1988, 1989, 1991; Miller 1983; Miles and Arnold 1991; Wiklund and Shepherd 2003; Keh, et al. 2007; Madsen 2007; Lumpkin and Dess 1996, 2001; Kollmann, et al. 2007; Hughes and Morgan, 2007	Top
		Entrepreneurial management	Stevenson and Jarillo, 1990; Brown, 2001	Top / Middle
		CE Strategy	Ireland, et al. 2009	Top / Middle
		Support for CE	Covin and Slevin 1991; Hornsby, et al. 2002; Hornsby, et al. 1993; Ireland, et al. 2006a, 2006b; Kuratko, et al., 1990, 2005	Interaction top-middle
	Project	**Process studies of CE**	Burgelman 1983a,b,c, 1985; Garud and Van de Ven 1992; Chung and Gibbons 1997; Abetti 1997; Wielemaker, et al. 2003; MacMillan et al., 1984; Vesper 1984; Zajac, et al. 1991; Stopford and Baden-Fuller 1994; Kanter 2004; Russel 1999; Kuratko, et al. 2005; Day 1994; Zott and Huy 2007	Middle or Interaction top-middle
	Individual	**Intrapreneuring**	Vesper 1984; Pinchot 1985; Stopford and Baden-Fuller 1994	Middle/Operating
		Characteristics / Traits	Alvarez and Barney 2007; Gartner 1992; Kirzner 1979; Gaglio and Katz 2001	Middle/Operating
Further literature	**Entrepreneurial core**	**New venture development**	Bhave 1994; Carter, et al. 1996; Alsos and Kolvereid 1998; Lichtenstein, et al. 2006, 2007; Delmar and Shane 2003, 2004	All three
	CE and Organizational development	**Entrepreneurial learning**	Dess, et al. 2003; Zahra 1999; Crossan, et al, 1999; Jones and Macpherson 2006	All three
		Ambidextrous organizations	Gibson and Birkinshaw 2004; O'Reilly and Tushman 2004, 2008	Top
		Co-evolution	Volberda, et al. 2001; Volberda and Lewin 2003; Mom 2007	Interaction top-middle
	CE as an organizational behavior	**Innovation champion**	Markham 1998; Howell and Boies 2004; Howell, et al. 2005; Hornsby, et al. 2002; Kuratko 2007	Middle / Top
		Knowledge broker / gatekeeper	Zahra and George 2002; Todorova and Durisin 2007; Tushman, 1977; Hargadon 2002; Hayton and Kelley 2006	Middle / Operating
		Entrepreneurial leadership	Dess, et al. 2003; Gupta, et al. 2004	Top / Middle
		Sponsor	Day 1994; Garud and Van De Ven 1992	Top

	Activity	Cases
Discovery	**Opportunity driven:**	
	Combine or use knowledge for novel ideas	3,15,16,17
	Decide to explore opportunities	1,2,3,10,15,17,18,19,20,21
	Introduce ideas by engaging in related activities	7,10,11,16,17
	Introduce ideas by environment scanning	4,10,14,15,19,21
	Match new technical solution to market needs	1,5,8,9,11
	Problem driven:	
	Identify the problem	16,17
	Introduce idea by thinking about work related issues	8,9,10,11,13
	Identify new mean-ends relationships	1,9,20
	Volunteer	11,13
Evaluation	*Create and articulate (preliminary) vision*	1,2,3,4,7,8,9,10,11,12,13,15,16,17,18,19,20,21
	Gather information:	
	Estimate market	1,3,8,11,12,13,14,21
	Gather relevant political and insider information	4,13,14,17
	Gather relevant technical & market information	1,2,3,4,5,6,8,10,11,12,15,18,20,21
	Pair up / acquire missing skill	3,4,7, 8,9,11,13,17,20
	Gather feedback from customers	1,6,10,18
	Talk outside dept about new ideas	4,8,17,20
	Frame the opportunity:	
	Focus and target ideas	3, 6, 8,10,11,12,13,15,17
	Frame challenge for the team	1,3,5,6,8,12,18,19,20
	Structure ideas, prepare a proposal	4,8,10,11,13,16,18,20,21
	Prepare a business plan	1,3,5,8,11,12,13, 16,14,17
Legitimation	*Communicate the project:*	
	Communicate the project within organization	1,3,10,17,18,20
	Develop and use communication networks	1,14,20,21
	Increase org. awareness of the potential of ideas	1,13,16,17,21
	Educate market	1,2,7,10,8,15,16,19,21
	Negotiate for the project:	
	Engage in horse-trading	1,6,7,13,17
	Engage in symbolic actions	1,7,8,11,13,16,19,21
	Path clearing / negotiating for the project	3,4,6,7,9,10,13,17,20
	Take responsibility for the vision (put own reputation)	1,4,11,9,19
	Build horizontal coalition:	
	Get acceptance / Cooperate with organizational members	1,11,6,2,9,10,12,13,8,16,15,18,19
	Sell idea to the team, keep their confidence	1,5,9,10,13,16,18,21
	Enable energy, build commitment, consensus and trust	1,3,5,8,9,11,12,13,18,19
	Establish positive relationships within org-n	4,11,6,7,12,16,17

Build vertical coalition:		
	Suggest and sell ideas to immediate management	1,3,4,11,13,8,17
	Sell idea to higher man-t levels / Maintain their support	1,3,5,11,6,20,9,10,13,8,16,17,18,19
	Use support of decision makers	11,6,20,9,10,13,8,16,18
Prove credibility:		
	Filter interference, fight concern	1,5,6,8,13,18,19
	Provide legitimacy internally and externally	1,4,11,20,7,9,10,12,13,8,16,17,19
	Show clear strategic mission and fit	13,17,19,20,21
Initiation:		
	Give venture its impetus (formal inception)	3,5,11,10,8,16
	Implement ideas (w/o or before official approval)	3,17
	Initiate marketing efforts	1,2,5,11,6,7,9,10,12,8,16,15,17,19,21
Resources:		
	Acquire resources	1,5,11,20,10,12,13,17,21,18
	Mobilize or shift resources	1,10,8,15,18,19,21
	Build team	1,5,11,20,10,12,13,17,18,21
	Enable core of committed people around the idea	11,13,8,18
	Find people who can handle problems	1,3,7,9,10,18,21
	Convince people in other depts to commit their resources	1,20,9,13,18,19
	Build internal capabilities	1,7,9,14,18
	Get legal protection	5,7,12
Bypass normal procedures:		
	Bypass standard personnel procedures	11,9,10,13,17,18,21
	Bypass normal channels to pursue innovative idea	2,3,11,6,9,8,16,14,17,18
	Cut corners of the procedures	1,2,11,10,13,8,19
	Overcome organizational inertia	2,3,9,8,16,14,18
	Omit kill orders	4,19
	Hide venture progress from management	1,7,19
Coordinate project with the rest of the organization:		
	Coordinate efforts of the project team & operating units	10,12,18
	Foster exchange between contributors	1,6,20,7,8,18
Define and redefine different aspects:		
	Create prototype	2,11,20,7,10,13,19,21
	Define and create product bundle	1,2,5,7,9,10,12,13,8,16,19
	Refine, redesign the product	1,2,4,7,10,13,8,16,15
	Redefine project structure, placement, business concept	1,2,5,11,20,9,10,8,16,17,18,21
	Explore different courses of action	1,2,4,20,18
	Mentor and monitor venture's progress	1, 7, 10, 11,16,18,21

Exploitation (vertical label spanning Initiation through Define and redefine sections)

APPENDIX A. THE CASE-STUDIES OBSERVED

N	Case	School	Year
1	3M Optical Systems: Managing Corporate Entrepreneurship	HBS	1994
2	American Express Interactive	HBS	2001
3	AT&T Resource link	NAC	1998
4	Buddy March	HBS	2007
5	Corning Microarray Technologies	TSB	2003
6	Freymont - a successful internal entrepreneur	IMD	2000
7	Groen: A Dover industries company	HBS	1987
8	Hewlett Packard: The flight of the Kittyhawk	HBS	2006
9	HP' Procurve in 2009: Internal Entrepreneurship Navigates Evolving Corporate Strategy	Stanford	2009
10	Intel Corporation: The Hood River project	Stanford	1997
11	Internal entrepreneurship at the Dow Chemical Company	IMD	2003
12	Inxight: Incubating a Xerox Technology Venture	HBS	1998
13	Joline Godfrey And The Polaroid Corporation	HBS	1992/2000
14	Lucent Technologies: the Future of the New Ventures Group	HBS	2000
15	Managing internal growth at Nestle - the story of LC1	IMD	2000/2003
16	UPM Rafsec RFID Venture, 2004	IMD	2007
17	Mercury Rising : Knight Ridder's Digital venture	HBS	2003
18	Quantity Surveying services	LBS	1994
19	R.R. Donnelley & Sons: The Digital Division	HBS	1996/2000
20	The birth and growth of Toshiba's laptop and notebook computers	JBV[5]	1997
21	The GE Energy Management Initiative	Ivey	1994

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[5] Journal of Business Venturing

APPENDIX B. SAMPLE CODING

DISCOVERY

Thinking about work-related ideas:

> Spenner often asked, "How can we make HP a major player in the disk-drive industry? Why don't we have 20% market share? How can DMD become the next printer business for HP?"
>
> Case 8

Matching a new technical solution to market needs:

> At this stage all he [Lindström] needed to do was to explore the potential of the product and the needs of the market; what the potential end-users would be.
>
> Case 16

EVALUATION

Gathering political and insider information:

> Jones perceived that the greatest danger would come from within Gatwick. He had met BAA mangers from other divisions, and attitudes at Heathrow and elsewhere seemed far more apathetic toward new business development than at GAL.
>
> Case 18

Acquire relevant skill

> Buddy even acquired a rudimentary understanding of the Japanese language and became familiar with Japanese body language. By the time of the Futaba contract, Buddy was well versed with the Japanese and their business methods.
>
> Case 4

ENROLMENT AND LEGITIMATION

Enlist/use support of management:

> In addition to Clarke's ISG salesforce, the Digital Division was seeking revenue through Donnelley's other salesforces, for which Schneider, now the division's director of marketing, and her product managers provided technical and product support.
>
> Case 19

Engage in "symbolic actions":

> However, as was his wont, he wanted to do something dramatic to push home the importance of his venture. He started a rumor via e-mail two weeks before the March meeting, claiming that a major competitive announcement was in the offing.
>
> Case 11

EXPLOITATION

Acquire / mobilize resources:

> He received $100,000 to research the idea further and build a prototype for demonstration.
>
> Case 11

> To investigate this issue, Melby assigned two development subteams to explore the technical feasibility of both the glass specifications and the screen frame. Right away both teams began to involve people, resources, and expertise from many other parts of 3M and from the outside.
>
> Case 1