Microfoundations and the birth of a firm's identity:

How entrepreneurs deal with routines to entrench their start-up in an ecosystem

EGOS Sub-theme 03: (SWG) The Entrepreneurial Origins of Organizational Routines and their Impact on the Development of Organizations

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INTRODUCTION

How to shape successful ventures, ensure that an entrepreneur's journey will lead to create viable businesses over time?

It is argued that organizations are built on habits and routines in place that are defined as dispositions to follow certain behavioral tendencies motivated by appropriate contexts and environments (Abell et al., 2007; Becker, 2012; Cohen, 2012; Nelson & Sidney, 1982). Prior work stressed that the individual identity, founders' habits influence the emergence of organizational routines. Bryant (2014) argues that founders can better manage the initial imprinting process thus enhancing a venture's capacity to adapt.

Besides the founders' identity and their imprinting memories, ventures' identity is influenced by its corresponding ecosystem. For instance, to promote and ensure firms' creation, local ecosystems create incubators, co-working spaces oriented to support the entrepreneurship activities. The principal objective is to help premature companies to grow and become independent, strengthen their offer, help them launching their business. For instance, in Europe, the incubation and mentoring offer drastically increased over the last years aiming to produce successful firms that will leave the incubator financially viable and independent. How do start-ups make use of these structures to actually build their identity, shape their routines?

This research seeks to understand how routines contribute to the creation of identity and which type of routines 'strengthen' ventures identity.

CURRENT UNDERSTANDING

Identity construction for emerging ventures

Identities are basis for shared perceptions and actions that are strategically created and managed (Cornelissen et al., 2007). This paper deals with an identity in a more general way compliant with the work of Cornelissen et al. (2007) and other articles of special issue on organizational and corporate identity published by British Journal of Management in 2007. Cornelissen et al. (2007) discuss theoretical differences and similarities between social, organizational and corporate identity. The authors define social identity as forms by which individuals perceive themselves, and being seen by others, and as part of a social group (Haslam & Reicher, 2007; Turner, 1999). The attachment of an individual to a particular group contributes to the formation of his social identity (Stets & Burke, 2000). Organizational identity is often seen as a set of shared cognitions, or as shared language and behaviors (Cornelissen et al., 2007). Corporate identity determines the ways in which organizations present themselves to external audiences, it is what organization represents (Balmer & Gray, 2003; Balmer & Soenen, 1999). By demonstrating the connections within the three distinct (and still overlapping) literature on identities; Cornelissen et al. (2007) underline the necessity to connect micro- and macro- level observations to better understand which role the corporate identity plays in creating the meaning, the form, and indeed the very possibility of organizational life. Three essential factors of organizational identity are believed to be its centrality, enduringness and distinctiveness (Corley et al., 2006; Gioia et al., 2013b). Moreover, it is believed that organization can actually have multiple identities.

Regarding the identity construction, the research demonstrates the importance of identity-relevant events such as the firms' foundation and their early years of existence and the narratives they crafted (Gioia et al., 2010; Ravasi & Canato, 2013). Gioia et al. (2010) found out that the organizational identity requires articulating a vision, experiencing a meaning void, engaging in experiential contrasts, and converging on a consensual identity, negotiating identity claims, attaining optimal distinctiveness, performing actions, and

assimilating legitimizing feedback. Moreover, the authors underline that social construction and social actor views of identity-related also mutually constitutive in creating a workable identity.

Collective identity is theorized as an authoritative text that emerges through communicative practice and is drawn on for certain strategic ends (Koschmann, 2013). The emergence of the Internet, the digital era, knowledge driven economy are completely revolutionizing industries and restructure their value chains thus increasing the ambiguity in the process of identity construction. Traditional "bricks and mortar" businesses are facing the prospects of losing their competitive advantage owing to the emergence of new competitors in the "new economy" (Melewar & Navalekar, 2002). The new actors and especially the emerging structures like start ups, entrepreneurs dealing with the novel uncertain environments must realize that corporate identity is an important strategic element that should be considered in the need to differentiate. The future competitive positioning and the corporate identity of these structures highly depend on the building process of corporate identity in start-ups and more generally in entrepreneurship.

Organizational identity formation (along with organizational identity construction) involves interplay between external influences and internal resources (Gioia et al., 2010). The initial step of making sense of this interplay is considered to be imprinting (Kroezen & Heugens, 2012). When it comes to start ups, the entrepreneurial identity is progressively built and can be defined as the constellation of claims around the founder, new venture, and market opportunity as to "who we are" and "what we do" (Dowling & Otubanjo, 2011). To develop an entrepreneurial identity, individuals need to merge personal, organizational and societal capabilities (Obrecht, 2011). The research in entrepreneurship suggests strong effects of the founder's identity on an emerging organization (Whetten & Mackey, 2002) and the corresponding routines.

The research suggests strong effects of the founder's identity on an emerging organization since organizational decisions are often made by a single person (the founder) and because emerging firms are typically small entities and their identity remains to be shape (Barney et al., 1998; Whetten & Mackey, 2002). Fauchart and Gruber (2011) examine the identities, behaviors, and actions of 49 firm founders in the sports-related equipment industry and reveal three types of founder identities: 1) Darwinian that focus on competition with other

firms and are driven by their own economic self-interest; 2) Communitarians that view their firms as social objects that support and are supported by a particular community because of mutually beneficial relationships, and 3) Missionary that see their firms as political objects that can advance a particular cause for the benefit of society at large. The founders usually behave according to their identity types. For instance, in the communitarian cases the prospective founders decide to start a firm to pursue their passion for the sport and contribute to the community. Though, often start-ups are created by multiple founders who belong to the different types and thus, resulting in more hybrid identities. Moreover, the founders often evolve their posture through the entrepreneurship activity by ensuring the "trade-off between the emancipating aspects of entrepreneurship and the accommodation of constraints" needed to acquire resources (Rindova et al., 2009:). Hybrid identities might lead to intense negotiation, cause a conflict and even result in start up failure. What is not yet clear is the impact of hybrid founders' identities on the future start-up positioning.

Likewise, the founder type and its corresponding behavior are influenced by a variety of factors. The prior research attempted to understand the role of peer groups, parents, the sex, the geography zones; age in having entrepreneurial intentions (Falck et al., 2012). (Murnieks et al., 2012) looked into the role of entrepreneurial passion and identity in performing entrepreneurial behavior. They showed that an individual that has multiple identities next to the entrepreneurial identity has a better ability to ensure self-verification resulting in more positive outcomes for the entrepreneurial activities. The individual-level identity obviously shapes future firm-level identity (Barney et al., 1998).

Sarasvathy (2004) shows that the conception of new entrepreneurial forms emerge in case the founders collaborate in the pursuit of shared goals requiring coordinated action where the latter as argued by Bryant et al. (2014) is influenced by common autobiographical memory of founders. The founder type and its behavior are influenced by a variety of contextual factors like the role of peer groups, parents, sex, geography zones; age in having entrepreneurial intentions (Falck et al., 2012) and also the role of entrepreneurial passion (Murnieks et al., 2012). All these factors influence future firms' identity and become imprinted within a firm through transactive autobiographical memory system. Founders can influence the imprinting process and ensure a venture's capacity to adapt (Bryant 2012).

Though, are these factors sufficient to create a profitable venture? By examining 380

emerging entrepreneurial activities during 18 months Davidsson and Honig (2003) confirm that human and social capital influence the entry of individuals to the entrepreneurial process. Though, they only weakly influence the creation of successful venture. Indeed, ventures form their identity not solely based on the habits, heuristics but on the way they learn, do and experiment during the process (Aldrich & Yang, 2014). In this case the surrounding ecosystem play an important role in the future firm's identity (Mathias et al., 2015; McEvily et al., 2012). The established eco-system, incubators provide trainings dedicated to help the entrepreneurs (Mustar, 2009). The network that the founders dispose initially and their capacity to mobilize external resources play important role in the future identity construction. Building on imprinting theory that explains the ways that individuals and organizations develop characteristics from experiences during a sensitive period and persistently reflect them through the environmental changes (Higgins, 2005; McEvily et al., 2012), Mathias et al. (2015) indicate that this perspective enriched our understanding on how the founding decision are made, what are the environmental conditions at the creation showing their impact on the future organizations identity. Though the authors indicate that the way in which main experiences and environmental elements how these sources of imprint impact the future venture management. The entrepreneurs' identity highly depends on the local ecosystem generating the place-based on location specific discourses (Gill & Larson, 2013) and this creating 'ideal' local entrepreneurs. The founders ability to understand the regional shaping, integrate into the evolving ecosystems and strengthen their identity to the changing environment are important for the future success of their entrepreneurial activities.

Another research perspective evidenced the role of the cultural and social meaning for the future identity and demonstrated how entrepreneurial stories (pitches) evolve in time and craft the firms' future identity (Lounsbury & Glynn, 2001). Wry et *al.* (2011) focused on the problem of legitimacy in nascent collective identities. The authors argue that clear collective identity is a reflection of the group's orienting purpose and core practices. Moreover, this research stressed that the identity is challenged with members expansion and thus, there is a tension between expansion and the identity building. Cultural entrepreneurship in the form of production and rationalising the stories is believed to be one of the enabling factors to gain legitimacy. High order concepts, discourses, codes are building blocks for storytelling and help to "identity core of the collective and delineate the boundaries" (Wry et al., 2011). Storytelling helps the entrepreneur to interact with others, to negotiate, to build a reference for the firm's identity and also to legitimize the acquired entrepreneurial experience through the corresponding pitch evolution (Downing, 2005; Steyaert & Bouwen, 1997). The identities become most prominent under conditions of perceived by the founders uncertainty and ambiguity (Aldrich & Fiol, 1994). In this case the entrepreneurs lack the legitimacy, often fail to ensure external validation since the frame of references is missing due to the novelty or originality of their offer. The context of ambiguity and high uncertainty improves the need to have entrepreneurial stories to interact with stakeholders but make pitches difficult to build.

Loué and Baronet (2011) indicate that trainings and seminars will accelerate the construction of the identity of future start-ups, strengthen the repository of expertise available to the company. Different aspects constitute identify such as meanings, labels, routines (Corley & Gioia, 2004; Gioia et al., 2000). An important part of future identity content formation research is to ensure the interplay between the adoption of routines, labels and the creation of their meanings (Rerup & Gioia, 2011). Routines play crucial role in identity formation and stabilization.

Routines as a mechanism for company's functioning

Organizations are built on habits and routines in place that are defined as dispositions to follow certain behavioral tendencies motivated by appropriate contexts and environments (Abell et al., 2007; Becker, 2012; Cohen, 2012; Nelson & Sidney, 1982). Kogut and Zander (1996) stressed that firms distinction is not entirely based on its market coordination, communication, learning (Kogut & Zander, 1996) is distinct from a market since coordination, communication, and learning are situated not only physically in locality, but also mentally in an identity. Since identity implies a moral order as well as rules of exclusion, there are limitations and costs to relying upon a firm for exchange as opposed to the market.

Organizational routines are shaped from the micro-level building blocks and drive patterns of behavior within the organizations (Cohen, 2012). Routines are considered to be essential on explaining behavior of firms (Nelson & Sidney, 1982). Howard-Grenville (2005) underlines the role of actors and the corresponding contexts on routines performance and their dynamics. Routines are essential and ensuring the business as usual. A key characteristic of knowledge work is that it chiefly involves non-routine, non-standardized tasks that require domain-specific knowledge (Edwards and Wigger).

That nascent entrepreneurs face higher levels of novelty and hae to build firms in cases where

routines, competencies, and offerings differ significantly from those of existing organizations (Maija Renko, ETP 2012). The author underlines that further work should focus the support to the earliest stages of organizational emergence for the emergent ventures. Firms routines can be adapted from the external ecosystem, adapted or even created internally.

Research problematic

Collective identity may take different forms and influenced by different factors. More general theory about collective identity dynamics should be developed thanks to the empirical research on various kinds of collective identities (Pratt, 2003). The motivation behind identity formation is believed to be primarily for legitimacy building. Still other factors such as the need to develop an internal guide for strategic action and day-to-day practices are important. Still, how these processes unfold and how precisely entrepreneurs shape the identify of the firm independently of their own is salient and requires further exploration.

All these elements contribute to the corporate identity construction and to routines formation. Though, the insights are lacking on how exactly the learning process, advising, incubators' business offers in association with the founders identity, their education collectively contribute to constitute successful ventures and shape their routines. By building on the existing research on identities construction, organizational routines this research tackles the following question: how routines contribute to the creation of identity and which type of routines 'strengthen' ventures identity. We aim to study how entrepreneurs' identity and the ecosystem shape organizational routines over time and result in successful ventures creation.

DATA AND METHODS

Research Setting

This study deals precisely with the collective identity construction in case of start up creation. Since we are interested in how routines are formed through the identity building process and the way the founders and their ecosystem influence this process, we analyze entrepreneurship ventures starting from their emergence. Given the exploratory nature of this study, qualitative study was chosen as opposed to a more quantitative approach. Multiple-case studies typically provide a stronger base for theory building (Shakir, 2002; Siggelkow, 2007). We have conducted a comparative multiple case research (Yin, 2008) of a creation of three start up

companies founded by the entrepreneurs following their postgraduate or graduate studies. This method enables us to account for an exploration of all three ventures in their natural setting and is relevant because our goal is to gain insights on the role of routines during the identity construction.

These three start ups were chosen since all of them: 1) were established by two cofounders right after their graduation from Master or Ph.D studies during equivalent time period, starting in 2012 or 2013; 2) were incubated during the identity creation phases and used the help of scientific or business advisors; 3) aim to establish firm's corporate identity and build routines in a longer term perspective. The first one is a pioneering start-up company, specializing in responsible research. It brings together social entrepreneurs and scientists to tackle today's social and environmental challenges and offers a range of responsible research services to social entrepreneurs, companies and research organizations. The second case is a start up that operationalizes academic advances in innovation management field and offers derived methods and tools to accompany innovative challenges within and across companies. They offer both R&D and consultancy services. The third one operates in neuroscience domain and is developing a fully mobile, wearable device for recording and analyzing electrical brain activity. Brain recordings serve for the stroke rehabilitation, to improve brain activity performance. The founders' initial motivation was to 'to bring the concept of high-quality brainwave reading in fully mobile environment to life'.

Data collection and analysis

The data was collected through in-depth semi-structured interviews integrally transcribed and analyzed and the review of the secondary data available online and provided by the founders. The discussion was structured along the venture's activity; its communication strategy; founders' background; their initial motivation; ecosystem of the firs and its evolution; vision (see Appendix A). All three authors actively took part in data collection. For each case, two different authors were conducting the interview and the third one analyzed the data independently from their external positions. This allowed checking for differences in identity constructs and ensured more homogeneous data collection & analysis.

The interviews were organized with the founders of each start up where founders were interviewed together and individually. Data collection was organized in the following manner. First, initial interview to understand the development of the start up and key moments was conducted with founders. Following the initial interview, secondary data collection & analyses to identify main constructs of identity creation and list the routines was organized. This information was consolidated in a form of the identity construction phases. Finally, two additional interviews to deepen the analyses and validate main phases of identity construction were conducted. Secondary data included start up communication, applications for different competitions, internal documentation, presentations, emails. Additionally, start ups communication in social networks (twitter, facebook) was retrieved and analyzed. In Case 1 and 2 additional informal interviews were conducted with actors from start ups' ecosystem.

A representative set was used to identify identity emerging constructs (see Appendix A), which were subsequently validated against all the interview transcripts. The open coding was obtained through a within-case analysis to reduce the data from each data setting, group the cases and ensure cross-case synthesis (Yin, 2008). Following Gioia et al. (2013a), in the 1st order analysis, we aimed to 'adhere to informant terms and make little attempt to distil categories' based on the interviews and data collection. In the 2nd order concepts, we look for similarities and differences among the categories and deduce concepts that better explain phenomena we are observing. *Intermediary constructs, construction of frame of references* emerged as the second-order concepts that serve to define aggregate dimensions and compare our findings. In Appendix we provide a short summary of routines and identity constructs identified along with the verbatim (for the Case 1).

ON THE PROCESS OF BUILDING IDENTITY

In all three cases the founders engage in the reflexive dialogue to improve their corresponding offers and aim to create companies in a long-term perspective. We observe that the progressive evolution of the corporate identity in these cases appears as a result of iterative and flexible processes influenced by the founders identity, the start up ecosystem and the construction of frame of references that results through the interaction between the entrepreneurs and their ecosystem. By frame of reference we define unifying concepts shared by a number of actors and set for designating a set of values and practices (*e.g., the concept of "corporate social responsibility" is an identity reference accepted within many ecosystems*). The interaction between these factors, their co-evolution contributes to the emergence and solidification of the corporate identity. The identity is actually built through a learning process in which the entrepreneurs are confronted to their ecosystem. Routines are progressively

adopted from the start up ecosystem (ADOPT) but also adapted (ADAPT), co-created by using internal resources (Co-CREATE) and created (CREATE) internally. These fours strategies of dealing with routines were identified through the cases. In the following we demonstrate how these routines contribute to the emerging identity of the firm. In the following we examine the identity construction and the role of routines across all 3 cases (see Table 1). The detailed process for Case 1 is depicted in Appendix 1. Cases 2 and 3 were analyzed accordingly.

Case 1. Firm identity: from a student association to the international actor in Responsible Research Innovation

The initial motivation was to create an association to help social entrepreneurs to deal with scientific challenges "and we said, there exist a lot of offers to help social entrepreneurs... services to market their ideas better, or develop their business model, many tools associated with business school. And suddenly we realized that someone has to help social entrepreneurs on the scientific side" and create awareness between students on the subjects related to social science. Founders were inspired by a model of Junior Company for the management of this association project where the latter was initially based on volunteering (Start up Ecosystem (SE)).

Right from the student association project, two founders progressively explored several routines for managing their brokering role between social entrepreneurs and students (CREA). For instance, 1) a social entrepreneurs database was created and a charter was elaborated to incorporate new social entrepreneurs; 2) procedures were developed to control interactions between entrepreneurs and students; 3) recruitment process for students was organized.

Discussion related to pricing (ADAPT) : « pay as you want », credits for students for their participation :

"The business model at the beginning was "pay as you want" because we are counting on empowering social entrepreneurs, etc. There was also the desire to make a fixed base to be sure of not losing too much money, but there was also the desire to adapt depending on if social enterprise is rich, poor, etc."

Founders worked on how to transform an association into a viable product:

"It turned out that after a while that the draft project of Case 1, we would like to give it a little more a chance, because we said that there was perhaps a potential need, and we could do

something more ambitious than 4 projects per year".

In order to do that, founders participated into the start up competitions, define a partnership model with universities. Thanks to the start up competition, company benefitted from an incubation program that mainly consisted in mentoring activities for business development. The case analysis revealed some limits of the mentoring model for the initial process of identity building:

"Because in essence, [incubator tutors] are struggling to understand what we do, because they are trying to understand it in a very rigid framework, or that we do is not stable. And besides, every time we almost have have an offer, they push us to write the business plan and it leads us to nowhere (...) They ask us to fill tables, excel, cost charges and no cost and two months later, the table, was useless, because our offer had totally changed and that the disrupted completely and they said "but it was not like your offer, you changed again ".

While experiencing these tensions, founders searched for funding model and choose database of skill-based sponsorship as a model of reference. They were inspired by the external company for this : *"We said we will do the skill-based sponsorship, because the people who seem to do things that look a bit like ours...they call it like that, well, it gave us a framework"*. They adopted the external routines and changed it in order to create one day trainings : *"One day, it was just a skill-based sponsorship, since it brings together company employees around the project of the social entrepreneur, they will help define some things of his project"*. One of the major steps in the identity building is the adoption of responsible research innovation (RRI) proposed by the European Union. The founders did not just adapt the concept, but tried to create new routines for RRI both at the start up level and more globally. The start up became one of the main actors of RRI nowadays and they redesigned their offers based on the RRI definition: *"We accompany them (companies) in their process of innovation through responsible research methodologies that allow to make emerge internally responsible research that will open new markets more in line with current needs"*. The routines were created accordingly to ensure the RRI offerings.

Case 2. Desire to build start up based model for a service firm

In Case 2 one of the founders was a researcher and an independent professionals. He was motivated to become independent. The second founder had a clear desire to build a start up.

Initial association happened based on the common competences. Initially they adopted the existing routines like term sheet to ensure the association of two founders. The ecosystem perceived them as a consultancy company but the founders wanted to ensure scalable business model of a start up "in order to build a start-up identity. If you are not in that world, it is impossible in fact to forge this identity" and create a firm identity independently from their own: "*They don't talk using your name (founders) but the name of the firm*". This desire brought them to adapt the principles of a start up venture and not a service form by participating at the facilitation sessions for start up emulations; signing to work at the co-working spaces initially.

The desire to create the real impact brought them to develop a network of advisors. The idea behind was to externalize research in engineering design and innovation management and develop offers based on the Concept-Knowledge (C-K) Design Theory. This positioning allowed them using the label of a spin-off of the engineering school that developed the C-K design theory. Both training and consultancy services were developed. Though, one of the main identity enablers was the decision to build an internal engineering center where new methods can be developed and enhanced. The panel of methods was progressively enlarged and quite soon, founders tried to ensure an independent position - "Now Everyone can create".

In the process of identity building, founders aimed to keep close collaboration with partner universities but also gain their independence. Indeed, we observed that the real identity creation process started when they formalized a new approach on "genetics of objects"; changed the name of the company that supposed to increase curiosity. To increase their sales, they established a new routine for pre-sales activity where they proposed to have free "live" demonstration of the method applicability based on their client problem.

They developed the systematic process of insertion for new hires in the firm (collaborators or trainees). Every new employee in the company has a list of books to read and has to write a chapter on one of the innovative methods for the online book published on their website. The founders also decided to create a board for all the permanent employees: "we wanted to share our vision with Joe, we want that when we talk to him, he is able to say no guys I don't want to do that, I think it is not in the our values".

Case 3 : Product based vs. firm identity

In Case 3, founders had scientific and engineering background in biomedical research. Routines adopted from the incubator like business modeling, commercial development, on organizing the firm development were really useful to organize the company's activity (ADOPT). As one of the founders stated, "*As an engineer I discovered that people like different things*".

The incubation actually allowed them finding a mentor who coached them on the tools for business building, showed "*how many things exist and why they are important ; why do you need to address them and make a proper plan*". Different routines like contract templates, legal advices, accounting process, capital sharing, certification for a device really showed us using very quantitative methods, excel tables, etc.

They actively participated in competitions, pitched the idea during the events which gave them the visibility at the national level. Identity constructs initially were centered on the company's first product– its mobile EEG platform for stroke rehabilitation.

To further develop the prototype, they hired interns: "we started to hire people (from strictly engineering point of view). We hired two students to help test things and debug prototypes"

Routines were co-created right from the start to ensure the right functioning of the start up. For instance, partnership with research institutions to sell the devices to the research centers was established "we targeted scientists, this is our primary group of customers and we try to add value for them" (Co-Create). Right from the beginning, they decided to outsource fundamental research activity for scientific partners. Partners got the device kit for free in order to conduct research and publish papers. This allowed them to improve the product and promote it thanks to the research publications (CREATE).

	Founders Identity	Building an intermediate identity	Start up Ecosystem	Example of routines
Case 1	 1/ Two master students sensible to the problematic of social science (thanks to their trip to Japan) 2/ Desire to Help Social entrepreneurs by making 'high quality science' and 	 1/ Intermediary to ensure a connection between students who volunteer to help social entrepreneurs 2/ Database of competences as a vector of financing 	 1/ Engineering school ecosystem 2/ Campus 3/ Corporate Social Responsibility as a term 	ADOPT : Inspired by external company to develop an offer based on the skills sponsorship model (intermediate between large groups and social entrepreneurs during events) Co-CREA : Design of the

Table	1.	Synthesis	of	main	findings
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	motivate other students to engage in resolving social and environmental challenges	3/ Discovering a term Corporate Social Responsibility and becoming an active actor in promoting it with the EU and MIT: "Help companies in their process of innovation through methodologies of responsible research"	introduce by the EU	offer relying on RRI notion; Establishing a routine for business development CREA : Defining models of partnership with universities
Case 2	 1/ One of the founders a researcher and an independent professionals: a motivation to be independent; Second founder – a desire to build a start up. Initial association based on the common competences 2/ Desire to create a real impact 	 1/ Focus on creating an engineering of methods center and not a consulting company (based on the methods invented by the engineering school) 2/ Enlarging the panel of methods to be used; seeking for an independent position-"Now Everyone can create" 3/ Designing a new approach of 'Genetics of objects' 	 1/ Consulting company 2/ Spin-off of the Engineering School: Concept- Knowledge Design Theory 3/ Incubator – exposure to start up community 	ADOPT Scalability business model of start- up; firm creation based on the association of two founders; trainings within the incubator and steering meetings with advisors ADAPT Co-working rules and facilitation for start-up emulation; Regular experience feedbacks by mentors and successful entrepreneurs; Accounting structuration of the firm, Systematic process of Insertion and learning for new-comers in the firm (collaborators or trainees), Structuration of a commercial pipeline on 350 potential business customers CREATE : storytelling for the company name; recruitment process, board for all the permanent employees
Case 3	 1/ Research scientists following the advanced studies of Biomedical signal processing 2/ Initially not entrepreneurship-based thinking (Engineering focus) 3/ Built their entrepreneurship posture only in 2015 during the acceleration 	 1/ Research Idea more than start-up or based idea: bring the concept of high-quality brainwave reading in fully mobile environment to life : "we can make a start up out of it" 2/ Starting from a duct- taped prototype to measure quality brainwaves outside of lab in 2012, they create 	 1/ Two research groups 2/ Two scientific advisors from Oxford and Serbia 3/ Incubator in Serbia : Competition of best innovation in Serbia, business advisors 	ADOPT: accounting, business developmet ADAPT : recruitment process with intern students Co-CREATE : network of scientitic collaborators CREATE: process of promoting and improving the product thanks to the research community and scientific publications;

a revolutionary device SMARTING, high-end scientific mobile EEG devices	4/ Accelerator	
3/ An integrated mobile brainwave reader BRAWAS - headphones with brainwave measuring capacity, allowing to observe and interact with surroundings differently		

FINDINGS AND CONTRIBUTION: ROUTINES THAT SHAPE EMERGING IDENTITY

By focusing on the interactions of different factors and the way they influence the future identity, we designate the importance of several intermediary constructs. First, the communication elements (e.g., pitches) occur as a mean to legitimize action, attract the future partners and their ecosystem, establish a network (Lounsbury & Glynn, 2001; Steyaert & Bouwen, 1997). Pitches help to trace the evolution of start up identity. Second, we observe how mentoring activity help entrepreneurs to appropriate the existing tools and shape their routines. When a mentor shares a common understanding the frame of reference that start up is using or should use, supervises the project from the beginning or knows sufficiently enough the offer, the experience is perceived as rich and "satisfying". Mentoring schemes, innovation trainings on business model formalization like business model canvas, lean management board help to demonstrate the entrepreneurs the limits of their actual business models (Blank, 2013). For instance, while following experts who specializes in business models design, founders will be exposed to define their business routines. Yet, to create efficient routines, it is not sufficient to just apply the existing methods which could result in *'nice on the paper business plans'* being extremely hard to apply or unrealistic at the same time.

It is important to stress that the identity is progressively formed through the interaction between the entrepreneurs and their ecosystem where some references gets adapted from the ecosystem (like in case of "corporate social responsibility" see Case 1); designed by founders in the process of interaction within their ecosystem ("genetics of objects" in Case 2); or by modifying the existing references within an ecosystem (database of competences in Case 1; or adapting a concept of high-quality brainwave and adapting it to the mobile environment in Case 3). These processes of appropriating, modifying or rejecting the common frame of references that the existing ecosystem disposes strengthens the corporate identity. For instance, our study demonstrates that rejection of an ecosystem's identity reference reinforces the entrepreneurs' position where they seek to create new frames of references compliant with the external stakeholders that, in return, operate as micro foundations of the nascent firm.

This paper demonstrates the mechanisms that entrepreneurs use to shape their organizational routines at early stages of their ventures' existence. We demonstrate how the intermediary constructs - pitches, business model and mentoring guidance - confirm the iterative and flexible nature of the interaction process and demonstrate that the collective identity of the firm, the entrepreneurs and their ecosystem are highly dependent. By building their frame of references, entrepreneurs are capable of challenging their initial imprints, design routines that are better capable of adapting to the changing environment (Bryant 2002). Entrepreneurs do not necessarily adapt the routines but can actually design new ones based on frame of references, avoid positioning their offer in a too risky, limited area by acting on their intermediary constructs. The main drivers to better 'design' the interaction among start up and ecosystem is precisely by challenging their external references are entrepreneurial stories and formalization of commercial offers.

The initial firm's identity is built once there is a convergence between entrepreneurs' ability to legitimate themselves as firm leaders and the ecosystem recognition of the venture existence and its appropriation as a firm independently of the founders' identity. We exhibit how start ups can affirm their identity by taking an active part in the ecosystem creation (like in Case 1). This intermediate identity construction helps to shape relevant routines for a startup. Still they do not guarantee venture's success in long term. Its identity has to be constantly challenged and evolve with the ecosystem by ensuring its differentiation and stabilization over time.

Start ups initially adopt and adapt routines from the external ecosystem. But once, the process of identity construction begins, routines are created internally or co-created with the ecosystem. In Case 3, the current firm identity is based on its product. All the routines that are created internally are product based. In this case, the identity of the firm is still emerging. Once identity is at stake, there is a shift towards more focused routines created internally.

This research reveals that the external routines can slow down the emerging identity of the firm. It is risky to just adopt the routines proposed by external actors such as incubators or business advisors. For instance, as we observed in Case 1, the founders were struggling to create their business development mechanism. The routines proposed by the incubator were hard to adapt. Or in Case 2 when founders tried to adopt the business model for service consultancy companies initially. This appeared to be too expensive and they created one-day trainings. Overall, it is important to check for validity of routines that are adopted externally.

Through an in-depth description of the process of identity construction based on the three cases, this paper offers important practical insights on how to ensure the progressive evolution and stabilization of the corporate identity. It proposes managerial recommendations for entrepreneurs dealing with high ambiguity and struggling to determine their frame of references and for the ecosystem of players around them.

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Appendix A. 1 Semi-structured questions

I Your Activity: offer, clients, projects, actors

- What was your initial idea? Whom did you target? Which customer groups? Value for whom?
- Your first projects? How did you tackle them? How did you establish the first contact with your customers (who helped? How?)
- Regarding your customers: which 'targets', your privileged actors within the company?
- Your successes and failures? What were the difficulties? What did you learn?
- What are the major events/ actors that influenced your thinking?
- Do you collaborate with other start ups? Firms? Actors in general?
- Did the first "projects" permit to finance your activity?
- How long did it take from the initial idea till the creation of start up?
- How did you validate your business hypothesis? Your first business model?
- From the beginning of your activity till now: in your opinion, how your offer evolved? Why?

Communication

- Why did you choose this name for your company? What is your mission statement? Slogan? How did it change from the moment of creation? Why?
- Pitching, Presentation material: Where did you present your experiences? Did you pitch?
- Contests/ did you take part in them? Relations with entrepreneurs' contests?
- How do you plan to improve your 'visibility'?

II Founders' background/ Initial motivation for launching an entrepreneurship activity

Education

- Tell us about your background: which academic curriculum? Which type of graduate education?
- Why did you decide to become an entrepreneur? When did you start to think about your project? Does a special event commit you in the project?
- How did your education strengthen/ weaken your motivation?

Family/friends

- Do you have the entrepreneurs in your family/ within your friends?
- Do they support your project? How?

In case of multiple founders:

- How and where did you meet?
- Why did you decide to create a firm together (hobby, education, complementary skills)? How did your team emerge?

III Ecosystem of your firm: its evolution / references

- Are you based in the incubator? Co-working space?
- How were you "incubated"? What is the business model of your incubator (part of the capital, location services, trainings, etc.)?
- Are you satisfied with your incubator(s)? How does it help you: network; trainings; resources?
- Do you interact within any other actors (partner companies, start ups) within the incubator's network? How do you describe your interaction with them?
- Do you consider yourself as a spin off of any institution/company? If yes, how did the "parental" structure helped/ helps you?
- What are the sources of your initial capital? Personal savings, family funds, external investors, institutional funding
- Who are your competitors? Why are you different?
- In your opinion, how the different actors perceive you (customers, competitors, incubator, partners, venture cap)?
- Which other ecosystem(s) can help your company to growth (in your opinion) but are difficult to have the access to?

IV Vision & future of the firm

- How do you see your company in 5 years/ 10 years? Do you have a clear vision? Does it differ among the founders?
- Do you recruit? Will you recruit? Which profiles for future collaborators?

Appendix A.2 : Case 1

Identity constructs (Found Intermediate identity of the st	ler Identity (FI), Start-up Ecosystem (SE), art-up (SI))	Routines (co-creation CO- internal creation CREA)	CREA & adoption ADOPT, adaptation ADAPT,
Main phases	Verbatim	Main phases	Verbatim for the routines emergence
Create association to help social entrepreneurs from scientific aspects and create awareness among students (Founders Identity (FI))	 "and we said, there are many things to help social entrepreneurs marketing ideas , or their business model , many tricks associated with business school. And suddenly we realized that there is someone has to help them (social entrepreneurs) on the scientific side" "in fact, our primary interest was scientific interest. It had to be really interesting for students from a scientific perspective. And from the social side for the entrepreneur" 	Founders progressively explored several routines for managing their brokering role between social entrepreneurs and students (CREA). For instance, 1) a social entrepreneurs database was created and a charter was elaborated to incorporate new social entrepreneurs; 2) procedures were developed to control interactions between	 « Yes, to choose the projects we formalized a charter - to say whether we accept or not to help » « we did a lot of work during the first year, to go on all the social networks we know and create an excel sheet with all the social entrepreneurs we identified" "In fact students did not exchange a lot with the social entrepreneurs. It is we who ensured collaboration. They made regular points with the students to see how projects wer eevolving"
They were inspired by a model of Junior Company for the management of this association project where the latter was initially based on volunteering (Start up Ecosystem (SE))	"for our goal we got inspired by the model of Junior Company (Junior Entreprise). Our idea was to offer small projects, scientific, rather short, which do not require too much time from students and inspire them from the scientific development perspective"	entrepreneurs and students; 3) recruitment process for students was organized Discussion related to pricing (ADAPT) : « pay as you want », credits for students for their participation Within the organization, they define their roles and tasks (CREA).	"So this is why we tried to limit interactions. This is because they do not know how to protect each other . Especially students " The business model at the beginning was " pay as you want" because we counting on empowering social entrepreneurs , etc. There was also the desire to make a fixed base to be sure of not losing too much money , but there was also the desire to adapt depending on if social enterprise is rich , poor, etc" "at first there was no division of labor internally. And precisely during these meetings with paperboards, we distruted tasks in the team"

Transforming association to the start up project (SI)	"It turned out that after a while that the draft project of SoScience, we would like to give it a little more a chance, because we said that there was perhaps potential, some needs, and we could do something a more ambitious than 4 projects each year. And a little more professional too. And it interested us to involve ourselves in an entrepreneurial project. "	Participation in the start up competitions (ADOPT)	"We try to better target [Start up competitions], in terms of theme or in terms of impact. Before, we participated a little bit to anything and everything. Now we need it worth it and that we have really a chance to win "
	involve ourserves in an enrepreneuriar project.	Defining models of partnership with universities (CREA)	[Tutors recommend us] " "Make a list of schools that interest you, contact them and propose them an offer". What we did, so we contacted forty schools in France, only engineering schools, none university. And then we internally rated them, we took in geographical areas that interested us, and well ranked one "
			"Roughly speaking, why [the incubator tutorship] was not helpful because their goal was to make us do a business plan"
		Limits of incubation model (ADOPT) - To define the offer - To define the vision - To realize a relevant market study	"Because in essence, [incubator tutors] are struggling to understand what we do, because they are trying to understand the way in a very rigid framework, or that we do is not stable. And besides, every time they would like that we have an offer, and then write the business plan, and then our business plan, it is ended. () They sent us fill tables, excel, cost charges and no cost and two months later, the table, was useless, because our offer had totally changed and that the disrupted completely and they said "but it was not like your offer, you changed again ""
			"And so, it is nice to say we must do market analysis, talk to your customers, but when your customer is the CEO of Total, you're not gonna call him and tell him you would have half an hour for we discussed and I

			do my market analysis. No, it's unthinkable"
Search for funding model and choose database of skill-based sponsorship as a model of reference (SE) Change the initial model based on skills to ensure high quality science	"Because we were involved on collaborative research projects with students, after [we look for collaboration with] large groups, initially it was just a way to get money for [our research activities]. So we had grafted it as a way of funding. " "We said we will do the skill-based sponsorship, because the people who seem to do things that look a bit like ours, well, it's people who make patronage of skills, they call it like that, well, it gave us a framework " "we were not so happy with skill-based sponsorship, because in the end, nothing really happens. We made a day, it was good but there is no real impact. So one day as part of a longer program ok, but one day in itself no! "	Inspired by external company to develop an offer based on the skills sponsorship model (intermediate between large groups and social entrepreneurs during events) (ADOPT) Development of a short service model for large groups (in the service of social entrepreneurs) (ADOPT)	"We followed their methodology and tried to adapt it to scientific stuff" "We organize a day with this company and a social entrepreneur. One day, it was just a skill-based sponsorship, since it brings together company employees around the project of the social entrepreneur, they will help define some things of his project. "
Discovering the label	"And after Europe, this is a development we had	Establishing a routine for	"She [The mentor] was super efficient, because one
"Responsible Research and	recently. It turns out that what you do, at first we did it without naming it. Then we realized that it	business development (CO-CREA)	of the first things she did with us, in fact, it was she forced us to make a list of our various possible
Innovation" (RRI) in			

European Union institution	Responsible Research, Responsible research and innovation. Then, I think it is a word that we found in Europe. "		the following week if necessary. And it is a business strategy that has not really paid off, but it does not prevent if we had never launched it, we could have never sold anything "
Investing in the field of corporate social responsibility (CSR) to better define the term of RRI	"Anyway, we thought we would make them change their definition! " "And in addition it also brings us a certain position of strength that [the notion of RRI] exists, it is very young, people have not at all the same definition, because we take our own definition, we want imposing as the definition of responsible research. And when you explain to people what it is, you can take the opportunity to say the European Union has asked me to be an expert to participate in the definition. We were immediately positioned as an expert. "	Design of the offer relying on RRI notion (CO-CREA)	"Yes it gives us business keys we had not at first, but really everything was concrete and operational. And it is really what we needed, especially on the sale management. Someone to accompany us before [client interactions]. Precisely because our offer, we do not know what it is until we sold it " "And I think we started to really define what was to be, what will be, the mission of SoScience, Only at the beginning of this year to January, February, 2014. And it was really well for us when we found the word "responsible research and innovation" just this
They refine their positioning in CSR, offer support to companies in their process of innovation using RRI. The social entrepreneur is no longer central to their proposal. Active involving in the definition of RRI concept in European institution.	"We accompany them in their process of innovation through responsible research methodologies that allow to make emerge internally responsible research that will open new markets more in line with current needs" "But the heart is true that it is always in science, hard science, first because it's what we love and that's what we can do. And always with social purpose."		wording, because it allows us to put things inside " "So we what that brought us was credibility, it is to feel better by saying we did "this" and developed it. And it has opened some prospects because suddenly I read the OECD reports, the reports of the EU, so it feeds my thoughts. And then there are calls for EU projects and a whole totally different ecosystem, the EU and the OECD, so it opens up new eco-systems [for SoScience development] "
Investing in the field of corporate social responsibility (CSR) to better define the	"Anyway, we thought we would make them change their definition! " "And in addition it also brings us a certain position		

term of RRI	of strength that [the notion of RRI] exists, it is very young, people have not at all the same definition, because we take our own definition, we want imposing as the definition of responsible research. And when you explain to people what it is, you can take the opportunity to say the European Union has asked me to be an expert to participate in the definition. We were immediately positioned as an expert. "
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Active involving in the definition of RRI concept in European institution.	purpose. "