



HAL
open science

Resilience and effectuation for a successful business takeover

Aude d'Andria, Ines Gabarret, Benjamin Vedel

► **To cite this version:**

Aude d'Andria, Ines Gabarret, Benjamin Vedel. Resilience and effectuation for a successful business takeover. *International Journal of Entrepreneurial Behaviour and Research*, 2018, 24 (7), pp.1200-1221. 10.1108/IJEBR-11-2016-0367 . hal-01898953

HAL Id: hal-01898953

<https://hal.science/hal-01898953v1>

Submitted on 19 Oct 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Resilience and Effectuation for a Successful Business Takeover

Aude d'Andria, Inés Gabarret, Benjamin Vedel

Abstract

Purpose:

This study explores how resilience can support entrepreneurs in uncertain environments. The study's objective is to show how different dimensions of resilience (emotional/cognitive) are dynamically connected to different logics of actions (causation/effectuation) allowing the development of a successful entrepreneurial project.

Methodology: The study is based on a qualitative analysis of a blog written by an entrepreneur during the first seventeen months of a search, negotiation, and financing process for a company takeover.

Findings: The results highlight that in high uncertainty, strong entrepreneurial resilience and shift of logics of action can contribute to the success of a business takeover. This study identifies forms of resilience during the business takeover process that helped the entrepreneur overcome adversity and succeed. Moreover, these forms of resilience seem to be related to effectual and causal logics.

Practical implications: This study could help future entrepreneurs succeed in the creation or takeover of an organization by improving knowledge of the relationship between resilience and logics of actions.

Originality: This study proposes a different approach to the study of entrepreneurial resilience by analysing it in relation with the logics of action (causation/effectuation). Moreover, the study offers a modern methodological approach by using an internet blog as a data source.

Keywords: Entrepreneurial resilience, business takeover, effectuation, small and medium-sized enterprises.

Paper type: Research paper

Introduction

In 1988, William Gartner, discussing the entrepreneurial process, wrote: “How do we know the dancer from the dance?” This critical question was intended to orient research on behavioural as opposed to trait-based approaches, considered by Gartner to be unfruitful. Instead, Gartner (1988) claimed that research in entrepreneurship should focus on what the entrepreneur does and not on who the entrepreneur is. As he explains, because entrepreneurship is complex, in a behavioural approach “we do not artificially separate dancer from dance” (Gartner, 1988). Following this point of view, this study aims at understanding how resilience dimensions, at a psychological level, interact with logics of action (process level) to accomplish an entrepreneurial project in a context of high uncertainty.

There are different ways to become an entrepreneur, such as starting a new venture or taking over an existing business (Block et al., 2013). This study analyses a process of search and takeover of a business by an entrepreneur. Business takeovers are mainly studied in the succession in family firms (Block et al., 2013). However, sometimes the successor is an entrepreneur looking for a business opportunity, and not a family member. In such cases, identifying and evaluating the right organization to buy can take several months or even years. The opacity of the market of companies available for purchase presents a challenge (Fayolle, 2004). Successful companies do not want to openly communicate their intentions to be taken over for fear of creating uncertainty among their stakeholders. As market information is difficult to obtain, the entrepreneur seeking to take over an organization faces high uncertainty.

From a behavioural perspective, different theoretical approaches exist in entrepreneurship research. Among them are the theories of effectuation and causation (Fischer, 2012). The concept of effectuation, introduced by Sarasvathy (2001), consists in choosing means to create particular effects, while causation consists in choosing effects using specific means (Sarasvathy, 2001). Even if those concepts seem to be in opposition, Sarasvathy (2001) explains that “both causation and effectuation are integral parts of human reasoning that can occur simultaneously” (Sarasvathy, 2001, p. 245). During an entrepreneurial process, both causal (planning) and effectual logics can be present in a complementary way (Sarasvathy, 2001; Read *et al.*, 2009; Fischer, 2012; Reymen *et al.*, 2015; Smolka *et al.*, 2016) and the entrepreneur can navigate from one to the other.

Even if studies aim at defining and comparing effectuation versus causation, and accept that they are complementary, it remains a lack of explanation about how the entrepreneur shifts from one logic to the other, and what are the individual processes that will allow the change of logic. In entrepreneurship, uncertainty diminishes the utility of causal approaches or planning (Bird, 1988), and increases the need to adopt effectual methods (Sarasvathy, 2001). At the individual level, literature shows that adversity and uncertainty are overcome by the development of resilience (Bullough *et al.*, 2014; Sutcliffe and Vogus, 2003). Resilience helps entrepreneurs to adapt after adverse circumstances (Bullough *et al.*, 2014). Resilience allows the individual to stabilize their emotions and broaden their scope of attention (Fredrickson *et al.*, 2003; Waugh *et al.*, 2008a; Waugh *et al.*, 2008b). Therefore, and considering that the entrepreneur needs resilient attitudes and effectual behaviours to deal with uncertainty, the aim of this study is to understand the relationship between resilience and logics of action. How does the entrepreneur make a change of logic and

what dimensions of psychological resilience appear during the process? More than a descriptive approach, the objective is to show how different dimensions of resilience are dynamically connected to different logics of actions allowing the development of a successful entrepreneurial project.

The paper is structured as follows. The first section develops a theoretical framework at the two mentioned levels (resilience and logics of action). The second section presents the research design based on the analysis of an internet blog by an entrepreneur seeking to take over an existing business. The third section highlights and analyses the results. Finally, a discussion of the findings and their implications is presented.

Theoretical Background

Psychological resilience as a dynamic process

Recent business and management research has begun to study the concept of resilience to understand why some organizations or individuals are more successful in overcoming unexpected, abrupt, and adverse events (Linnenluecke, 2015; Dewald and Bowens, 2010; Sutcliffe and Vogus, 2003; Masten, 2001). The subject has been studied both at the organization and the employee levels and encompasses different research streams from risk and disaster management, human resource management, supply chain management, and entrepreneurship (Fisher *et al.*, 2016; Ayala and Manzano, 2014).

Resilience is the ability to respond, adapt, and start again after adversity. It has first been considered a personal factor (such as gender or business experience) and understood to be a stable personality trait reflecting flexibility to adapt to emotional events (Genet and Siemer, 2011). In this way, a resilient individual is robust, resourceful, perseverant, with high motivation and optimism (Coutu, 2002; de Vries and Shields, 2006; Ayala and Manzano, 2014; Fisher *et al.*, 2016).

However, beyond being considered a personality trait, resilience can be interpreted as a dynamic process to deal with uncertainty (Sutcliffe and Vogus, 2003). In this viewpoint, resilience is a behavioural system in which “an entity (i.e., organization, unit, individual) interprets and responds to new challenges, depends on attitudes, expectations, feelings, and response possibilities derived from a history of prior experience (e.g., adaptation).” (Sutcliffe and Vogus, 2003). Therefore, resilience can be a learned behaviour, developed over time (de Vries and Shields, 2006; Luthans *et al.*, 2007).

Two psychological mechanisms appear when explaining resilience: the regulation of emotion (emotional resilience) and the flexibility of thought (cognitive resilience). Emotional and cognitive resilience are related to the emotional and cognitive adaptations the entrepreneur develops to overcome constraints. Fredrickson (1998, 2001) grounded the study of resilience in the development of emotions. Even if emotions are transitory, they lead to action in different ways. For example, a negative affect damages the capacity to recover from adversity and generates specific action tendencies (e.g., survive during adverse situation). Fredrickson *et al.* (2003)

underline that positive emotions can undo the effects of negative emotions and allow the cognitive broadening of the individual. People exhibiting a lack or little resilience have difficulty overcoming adverse situations because they remain cognitively inflexible, developing depression and negative emotional states (Genet and Siemer, 2011). They will have difficulties to make sense of failure (Byrne et Shepherd, 2015).

In particular, emotional resilience is linked to emotional flexibility (Genet and Siemer, 2011; Gross, 2007; Ong *et al.*, 2006) and can be considered as a positive behavioural adaptation after a negative event (Hayward *et al.*, 2010; Ong *et al.*, 2006). In fact, resilient individuals can adjust their emotions in the face of a stressful situation (Waugh *et al.*, 2008a; Waugh *et al.*, 2008b). Resilient individuals use their emotional resources only when it is necessary (when a negative emotion arises). Once stress is overcome, negative emotions no longer persist (Waugh *et al.*, 2008b; Ong *et al.*, 2006; Tugade and Fredrickson, 2004).

Cognitive resilience (Dewald and Bowens, 2010; Genet and Siemer, 2011) is based on Fredrickson's (1998, 2001) *broaden-and-build theory of positive emotion*. Positive emotions allow cognitive broadening, access to information and the exploration of other possibilities (Fredrickson, 1998; Isen, 2002; Fredrickson and Branigan, 2005; Genet and Siemer 2011). It improves resilience in a virtuous circle (Sutcliffe and Vogus, 2003), expanding learning in the long term and well-being (Fredrickson *et al.*, 2003; Nath and Pradhan, 2012; Byrne and Sheperd, 2015). According to Genet and Siemer (2011), cognitive flexibility allows people to distinguish important information and to adapt to a changing environment. It broadens the scope of attention and action repertoire to analyse the situation (Fredrickson and Branigan, 2005). For example, Genet and Siemer (2011) indicate that cognitive flexibility enhances the size and range of the consideration set for a choice and helps the entrepreneurs to select, reject, and put in perspective relevant information and materials. Isen (2001) indicates that cognitive flexibility allows "to switch perspectives and see things in multiple ways and come up with viable solutions (...) to cope with potential problems and avoid conflict". Isen (2001) adds that people with positive affect tend to be more creative, flexible and altruistic in the way they solve problems and negotiate (i.e., try to obtain "the most of both sides"). They also decide in an "efficient, effective and careful" way and tend to avoid risk due to a higher sensibility to loss (Isen, 2001). According to Genet and Siemer (2011), two cognitive processes are at stake: inhibition and shifting. Inhibition is about deliberately eliminating dominant or irrelevant information (Miyake *et al.*, 2000). Shifting is a process of "switching back and forth between multiple tasks, operations, or mental sets and implicate the ability to accomplish a new operation in the face of proactive interference" (Miyake *et al.*, 2000).

An entrepreneur looking for a company to take over will certainly face adversity and frustration because of the high level of uncertainty of the market. To continue with the project, the entrepreneur will need to develop resilient attitudes of two kinds: emotional and cognitive. However, in parallel, the entrepreneur will need to navigate between effectual and causal logics to adapt to uncertainty.

Effectuation and Causation

To understand how some entrepreneurs cope with the high uncertainty that characterises business start-ups, Sarasvathy (2001) introduced the concept of effectuation in the early 2000s in opposition

to the causal view of business creation based on opportunity discovery and planning. The concept is defined as a logic of action that begins with what is at hand, takes advantage of the unexpected, and develops action-oriented decision making (Sarasvathy, 2008; Sarasvathy et al., 2014). Effectuation assumes that under conditions of uncertainty, entrepreneurs adopt a different operating logic. The opportunity initially perceived is not a clear goal and can change during the business start-up process. The underlying idea is that entrepreneurial behaviour will be based on the availability of resources rather than on predetermined objectives. Instead of seeking optimization, the effectual entrepreneur attempts to minimize costs (acceptable losses) and securing resources involves the establishment of strategic alliances and the pre-engagement of stakeholders (Chandler *et al.*, 2011; Bhowmick, 2011).

Sarasvathy (2001) indicates that neither the causal nor the effectual logic is better, but one is more suitable than the other depending on the context. Effectual logic is most appropriate and efficient under uncertainty and limited resources (such as during the creation of activity). Causal logic is most adapted when the environment is stable, and the expected outcomes are known in advance. It is better suited for mature markets. Moreover, according to Fischer (2012), effectual and causal principles can work in a complementary way and the entrepreneur can navigate between both. It is then important to understand in which circumstances the entrepreneur develops a causal or an effectual logic (Sarasvathy, 2001; Read and Sarasvathy, 2005; Fischer, 2012). Several reasons explain that change (Harms and Schiele, 2012), such as the environment perception (uncertainty perception) or the expertise of the individual (control perception). Indeed, the entrepreneurs who have perceived that they can control what they have in hand and believe in their ability to transform their environment are those who can easily adopt an effectual behaviour (Sarasvathy 2001; Gabrielsson and Politis 2009).

At an individual level, Alsos *et al.* (2016) and York *et al.* (2016) show that the choice between effectuation and causation comes from the preferences of the entrepreneur or their way of living (i.e., their social identity). Engel *et al.* (2014) indicate that those with more entrepreneurial self-efficacy will be more effectual. In this case, entrepreneurial self-efficacy reinforces the perception of control over opportunities. Effectuation is related to the entrepreneurial expertise of the individual (Dew *et al.*, 2009; Read *et al.*, 2009; Sarasvathy, 2001). The entrepreneurial expertise allows the use of heuristics (psychological shortcuts). The entrepreneur is a central agent capable of creating and transforming his/her environment (Alvarez and Barney, 2007). Effectuation is then used as a means to control the environment and causation as a predictive instrument (Read and Sarasvathy, 2005; Smolka *et al.*, 2016). Dew *et al.* (2009) show that the expert entrepreneur uses effectuation through analogical reasoning, he solves the problems by using previous experience and by diminishing the importance of predictive information (Read and Sarasvathy, 2005; Read *et al.*, 2009; Harms and Schiele, 2012).

In an entrepreneurial takeover, adopting effectual logic could help entrepreneurs face the uncertainty caused by the perceived opacity of the business takeover market. The entrepreneurial takeover also supposes the choice of an organization in an existent market which will facilitate a causal approach. The context of this field allows then to study the shift of causal and effectual logics and to observe the conditions and circumstances of their development.

Our study shows that in uncertain environments, the shift to an effectual behaviour and the use of

heuristics is possible when the entrepreneur is capable of controlling his/her emotions. To the authors' knowledge, there is a lack of information about the role of psychological variables, and especially resilience, in this change of behavior (shift between causal and effectual). Therefore, this study aims at filling this gap.

Research Method

The objective of this research is to understand the roles that entrepreneurial resilience plays in the effectuation/causation change. In the next section we present the context of the research and the methodology developed.

Research design and context

This study used a qualitative design. Many researchers promote qualitative research because it facilitates exploration of the potential antecedents and factors for which little is known or has been explored (Corbin and Strauss, 2008). Qualitative research provides deep descriptions of processes (Richards, 2009), appears amenable to further quantitative research (Eisenhardt and Graebner, 2007; Yin, 2003) and helps to answer new questions, particularly in a field such as entrepreneurship research (Cope, 2005; Hindle, 2004).

Within this broader qualitative design, this study implemented an analysis of an internet blog of an entrepreneur looking to take over a business venture. A blog is a shortened version of the term "web log," with log meaning event log. According to Poynter (2010), a blog is a website organized as a set of chronological posts by an author or authors. Blogs were one of the first social media tools to be adopted by market researchers.

This research focused on the set of posts with a narrative approach (Elliot, 2005). A narrative is a discourse that provides insights into events and individuals' experiences to connect events in a meaningful way (Hinchman and Hinchman, 1997). A narrative allows the registration of events chronologically by taking into consideration the temporal dimension and achieving the effect of coherence that Ricoeur (1983) called a configuration effect. As Karl Weick asks in several of his works, "How can I know what I say and do?" a narrative is not simply a reference to the action envisaged, it also provides meaning to the action by incarnating the action. Therefore, discussing an entrepreneurial process is a way to clarify the process for others. Initially, this is a way to show and demonstrate the project before it really exists. During the process and the implementation of the necessary actions, providing such a narrative helps to link the first concrete elements and the strategic objectives. Entrepreneurship research notes the use of a narrative perspective as a suitable mode for producing local and contingent knowledge concerning the entrepreneurial process (Venkataraman *et al.*, 2013; Gartner, 2007; Rae, 2000; Steyaert and Bouwen, 1997).

Data collection

This study is on a French entrepreneur, Sébastien Eloir, who intends to take over a business. His personal and entrepreneurial profile corresponds to the profile described by the French center of

business takeover (CRA) in their 2017 rapport¹. Eloir is a 38-year-old man, married, and living with his wife and children (two girls) in a suburb of Paris. He has a significant upper management experience (14 years) as a managing director of an organization specializing in the distribution and rental of technical machines.

The authors selected the case from social media from the blogosphere. For Nardi *et al.* (2004), blogging is a social activity motivated by five social objectives: (1) to inform others of activities and whereabouts, (2) to express opinions to influence others, (3) to seek the comments and opinions of others, (4) to “think by writing,” and (5) to express emotional tension.

Eloir’s blog was found through a Google search using key words². The blog can be easily accessed (<http://objectif-reprise.blogspot.fr/>). No registration was requested and information on the blog has been posted on a public domain for free and is available to researchers.

Data were collected from entries posted by the entrepreneur during the process from the initial search to the end of the takeover process. Each week, from April 2006 to September 2007, the entrepreneur posted an entry reporting on the progress of the business process and reported on other aspects related to this process such as problems, feelings, or alternatives. A total of 78 weekly entries were collected covering the entire business takeover period. Given that blog entries were written in real time and posted on a weekly basis, contemporaneously, there is no bias from retrospective analysis (ex-post rationalization). Because the objective of this research is to improve entrepreneurship knowledge, the age of the data (roughly 10 years) should not be an issue. It can be said that the writer is “in the thick of things” (Yanow *et al.*, 2012, p. 352). This granted researchers full access to the opinions, comments, feelings and expressed emotional tensions of the author of the blog. At the end of the process, the entrepreneur stopped blogging and decided to create a second internet blog (<http://objectif-entreprendre.blogspot.fr/>). This second blog was analysed and contained 32 entries posted over the first three years following the business takeover. This blog enabled the study to assess the viability of the business takeover³.

Data analysis

For the data analysis, this study followed a qualitative content analysis based on an interpretative study. The content analysis is adapted to extract the presence or absence of specific concepts within texts or other material (Corbin and Strauss, 2008).

The objective of the study is twofold. First, to identify the dimensions of entrepreneurial resilience and the ability to adopt effectual/causal logic during the process of a business takeover. Second, to highlight the role of dimensions of entrepreneurial resilience and how these dimensions connect

¹ Edition 2017 Observatoire CRA de la transmission des TPE/PME”, available at:

http://www.cra.asso.fr/IMG/pdf/observatoire_transmissioncra-2017.pdf (accessed 31 March 2017).

² Several keywords in French were used. Among them: takeover’s blog, business transfer, takeover, buyer, seller, entrepreneurship, etc. Thirty-three blogs have been selected and studied regarding their contents and the quality and quantity of the shared information. After the first screening, Eloir’s blog was chosen for this study because of its regularity and the richness of the communication.

³ Ten years later the organization continues to grow. It consists of 12 employees and sales of € 1.850M (2016). In 2015, the organization name was changed to Sylvinov and aimed to go global (<http://www.sylvinov.com/fr/>).

with effectual or causal logics. The definition of concepts (causal and effectual logics of action, and emotional and cognitive resilience) and the examples of verbatims identified for these concepts are represented in table 1 below.

Table 1: Definition and example of main theoretical concepts

Psychological Resilience	Emotional Resilience (ER) (Vaughan et al., 2008a, 2008b)	Anticipation and adjustment of negative emotions	The use of emotional resources when necessary and the non-development of emotional resources during innocuous events.	<i>It was an important moment, but I was not as moved as I expected. No tears, no pinching in the heart when signing (Post 49)</i>
		Recovering	Allow quicker and more complete affective recovery.	<i>Even if it was hard, I drew from this trip only the positive (Post 21)</i>
	Cognitive Resilience (CR) (Genet and Siemer, 2011; Isen, 2001; Miyake et al., 2000)	Inhibition	Inhibition of dominant responses and the processing of irrelevant material.	<i>I could have chosen the air conditioning option with its exponential development, but it seems to me particularly energy-consuming and therefore off-topic. I stopped looking for this type of business (Post 15)</i>
		Shifting	Switching back and forth between mental sets (by activating relevant material and disengaging from irrelevant material).	<i>Another solution would be to follow a training outside Paris ... easier because there are fewer candidates but more difficult to manage on the family level! (Post 15)</i>
Logics of Action	Effectuation (E) Sarasvathy et al., 2014; Read and Sarasvathy, 2005; Sarasvathy, 2001)	Means-oriented	Starting with means (what you are, what you know, and who you know)	<i>What are our strengths with my partner to entice a seller? (Post 5)</i>
		Affordable loss	Invest what you can afford to lose (minimize costs)	<i>I will wait to see the advisor of the ANPE (National Employment Agency) to verify if I can have a subsidy (Post 3)</i>
		Partnerships (Crazy Quilt Principle)	Establishing and leveraging strategic relationships using pre-commitments	<i>Tomorrow I will go to the agricultural exhibition with the seller. (...) It is a fabulous opportunity to strengthen ties and to confirm our mutual intention to transmit/takeover (Post 45)</i>
		Leveraging contingencies	Contingencies as opportunities need to be leveraged	<i>I did it and was determined not to give up! I contacted the Regional Council immediately to find out if they had more information than me (Post 61)</i>
	Causation (C) Sarasvathy et al., 2014; Read and Sarasvathy, 2005;	Goal-oriented	Starting with ends: goals determine actions	<i>I am always looking for a 'climate engineering' training course in order to make my application more credible (Post 7)</i>

	Sarasvathy, 2001)	Expected return	Selection criteria based on expected return. Pursuing the opportunity and raising required resources to do so.	<i>The transaction will not happen because I consider that the company is overvalued and especially that the commercial environment does not have enough potential (Post 18)</i>
		Competitive analysis	Relationships are driven by competitive analyses and the desire to limit dilution of ownership as far as possible.	<i>The initial objective was to work on green energies because it is a growing market and it is important to do something for the planet (Post 28)</i>
		Avoiding contingencies	Contingencies are obstacles to be avoided, based on accurate predictions and careful planning.	<i>The objective is to keep control from A to Z (Post 12)</i>

The qualitative data collected for the study correspond to 78 posts from the blog of an entrepreneur (from April 2006 to September 2007). Based on the volume of data, researchers opted for a manual analysis. The analysis started by a data simplification strategy through a data coding phase (Miles and Huberman, 1994). This phase was structured in three steps: data preparation (extraction of the posts from the blog and chronological ordering in an excel document), data organisation (first descriptive coding), and topic coding (Miles and Huberman, 1994; Bernard and Ryan, 2009). Preparatory tasks before data coding consisted in highlighting relevant parts on the posts to discard data unrelated to the research questions (Miles and Huberman, 1994). For the descriptive coding, all 78 posts were analysed to understand the different steps along the entrepreneurial process. Double coding, as recommended by Miles and Huberman (1994), was conducted to check the reliability and validity of descriptive coding. Two authors carefully and separately read through the text and the analysis was confirmed in detail with a general agreement, after several discussion meetings by all team members.

The 78 posts were split into five phases following the approach presented by Reymen *et al.* (2015). The study of Reymen *et al.* (2015) analyses the change between effectual and causal logics during a process of venture creation. To explain the shift, the authors focus on key decision events. Those events, to be considered, have to produce a significant effect on the development of the company and have to be connected to an intentional action or decision of the entrepreneur. The intentionality has to be strong and the decision has to be initiated by the entrepreneur. Moreover, the idea of separating the process into different phases of analysis follows the classification of Fayolle (2004). Fayolle (2004) is one of the few authors to analyze the process of business takeover from the buyer's side. The author presents the process in several phases: (1) personal assessment and definition of the project; (2) identification of sources of information, construction of the network, and target selection; (3) diagnosis of the target company and drawing up of the business takeover plan; (4) negotiation and contracting, and finally (5) the actual transfer of ownership and control.

The analysis of the blog allowed the identification of five key decision events: (1) the decision to leave paid employment and to take over a business; (2) the selection of a project and the failure of the operation; (3) the decision to continue the search for a business to take over despite the failure

of the first attempt; (4) target selection and diagnosis for a second project; and (5) the search for funding and drawing up of the business takeover plan.

The first phase is composed of two parts (Steps 1.a and 1.b) and the last phase was split into four steps (5.a, 5.b, 5.c, and 5.d). The decision to consider sub-steps is based on the observation of events disrupting the progress of the observed phase. In Phase 1, following the decision to take over a company, the entrepreneur realizes the opacity of the takeover market. This information will change the way he looks at the market. In Phase 5, the search for funding is troubled by several refusals and waiting periods before the takeover can be done. Table 2 presents a description of each phase with information about the corresponding blog posts.

Table 2: Chronology of the business takeover process

Reference	Date	Events and Actions
1.a (Post 1 to 5)	April 2006	End of paid employment Decision to take over a company First contacts
1.b (Post 5 to 20)	May- September 2006	Understanding the difficulty of the market 4-week training for business takeover (Center for Business Takeover: <i>CRA in French</i>) Start prospecting for SMEs specialised in heating and plumbing
2 (Post 21 to 25)	October 2006	First attempt to buy an SME specialised in heating and plumbing (Nantes) Failure of the takeover
3 (Posts 26 to 44)	November 2006 – February 2007	Resume the search for companies New objectives, new selection of companies Decision to take over a new company
4 (Posts 45 to 50)	March 2007	Second attempt (Bordeaux) Negotiation with the business owner of Ménard-Darriet-Cullerier (MDC), an SME specialised in the manufacturing and the distribution of technical machines for forestry
5.a (Post 51 to 59)	April-May 2007	Start searching for bank loans to finance the takeover
5.b (Post 60 to 63)	June 2007	Refusal of the government agency to guarantee the bank loan and later approval
5.c (Post 64 to 68)	July 2007	Final preparation before closing the deal and signature
5.d (Post 69 to 78)	August- September 2007	Final closing of the business takeover of MDC with signing of the takeover contract

Succeeding the chronological understanding of the process, a second data coding was performed using meaning unit. In the literature, a meaning unit is also called an *idea unit* (Kovach, 1991) or *content unit* (Baxter, 1991). In this study, we have adapted Graneheim and Lundman's (2004 p. 106) definition of meaning unit to include, "words, sentences or paragraphs containing aspects related to each other through their content and context." The data were then indexed according to our research objectives from the literature review on entrepreneurial resilience and effectuation/causation and linked with the phases of the process to understand the data in context.

The richness of the blog allowed the authors to find several dimensions of resilience. However, for the scope of this study two forms of resilience were identified and used, cognitive and emotional (Sutcliffe and Vogus, 2003; Waugh *et al.*, 2008a; Waugh *et al.*, 2008b; Dewald and Bowens, 2010; Hayward *et al.*, 2010). The choice was based on the emergent relationship noted in the discourse between those dimensions and the two logics of action. Concerning entrepreneurial logics of action, segments of text were coded referring to the principles of effectuation and its causation counterparts (Sarasvathy, 2001; Fisher, 2012; Sarasvathy *et al.*, 2014).

A preliminary indication of reliability obtained between encoders was around two thirds for resilience factors and three quarters for the principles of effectuation. This reliability was in line with Miles and Huberman (1994) to not expect initially more than 70 per cent of reliability between encoders. Data coding was discussed by the authors and disagreements regarding the interpretation of the data were resolved through discussion and several tours of iteration between the literature and data.

Results

During the research process, the entrepreneur faced several problems including negative thoughts, frustration, and feelings of distress that could have been discouraging and make the entrepreneur return to the job market. However, instead of abandoning the project the entrepreneur developed a resilient behaviour that, combined with effectual logic, allowed for a refocus to continue the search until a satisfactory outcome was achieved.

This section presents and explains the results of this study. The analysis focused on two forms of resilience (cognitive and emotional) and two logics of actions (causal and effectual). Table 3 presents the dominant logics of actions and the mechanisms of resilience associated with each phase of the entrepreneurial process. Results show the alternative development of logics of actions and the presence of dimensions of resilience that appear connected with those logics of actions.

Table 3: Effectual/causal logics and emotional/cognitive resilience during the business takeover process

Reference	Dominant logic of action	Dominant resilience mechanism
<i>1.a</i> (Post 1 to 5)	Effectual	Emotional
<i>1.b</i> (Post 5 to 20)	Causal	Cognitive
2 (Post 21 to 25)	Effectual	Emotional
3 (Posts 26 to 44)	Causal	Cognitive
4	Effectual	Emotional

(Posts 45 to 50)		
5.a (Post 51 to 59)	Causal	Cognitive
5.b (Post 60 to 63)	Effectual	Emotional
5.c (Post 64 to 68)	Causal	Cognitive
5.d (Post 69 to 78)	Effectual	Emotional

To facilitate understanding, the results are shown in two parts. The first part shows the perceived links between emotional resilience and effectual logic, while the second part explains the links observed between cognitive resilience and causal logic. To support the explanations, some quotes from the entrepreneur's blog are presented. Quotes were translated from French into English by the authors.

Emotional resilience and effectual logic

Emotional resilience appeared as a compensatory mechanism in the face of an emotional impact caused by an adverse or stressful situation. In the analysis of the blog, emotional resilience appeared several times especially during effectual phases (1a, 2, 4, 5b, and 5d).

Phase 1a (Posts 1 to 5)

It is important to understand that the entrepreneur showed a predisposition to resilience from the moment he started the blog (*in my previous job I learned that I had the ability to bounce back and especially to accept what suits me*). He expressed this ability through a positive emotion which follows a negative one (doubt):

- *From my previous job, I will keep the memory of the difficulties faced, and the great moments of doubt (negative emotion).*
- *Above all, I will remember this immense solidarity and the involvement of the majority of colleagues to change the catastrophic situation in which the organization was. For now, it's the most important human experience of my professional life! (positive emotion).*

Byrne andt Sheperd (2015) say that when an individual tries to find a meaning to a negative situation, he/she develops a psychological resilience.

When he started the blog, the entrepreneur faced a stressful phase of reconversion needing to understand the new world of the takeover after leaving a job that lasted 14 years. There was also a need for patience even if there was insufficient time to develop the project. All of these aspects generated stress (negative emotion) :

- *I'm in a professional no man's land (Post 4).*
- *I know it's going to be tough and long, but I'm ready for it! (Post 3).*
- *Still a little more patience (Post 3).*

As mentioned in the theoretical part, several strategies of emotional adjustment can be developed to face stressful situations (anticipation, adjustment, recovering). The entrepreneur developed all

those strategies. For instance, he counterbalanced his guilt about taking some days off (*and even if I take some days off, Post 2*) with positive actions on the short term (to spend time with his daughter or to exercise), and he justified his actions:

- *I took the opportunity to drop my daughter to school (positive action). I learned the lesson, you have to know how to take advantage of these moments because they will not be eternal! (Uncertainty about the future).(Post 2).*
- *And, as long as I'm here, I set myself the goal of losing some weight by the end of May. (Hope, optimism)(Post 2).*

The entrepreneur showed an emotional resilience. He regulated his stress (days off / start of the takeover process) by driving his daughter to school and exercising. He did not solve the problem but he overcame the negative emotion through an action and a justification.

We can understand the expressed feelings through the many blog comments, the use of exclamation marks and sentences showing goodwill, or both at the same time. In this case, emotional resilience developed as a counterpart to feelings associated with stressful situations:

- *I will need to stay alert; I'll have to stick at it (Post 4).*
- *Good lesson of patience! (Post 4).*

He rationalized: *I also believe that this period is a transition period necessary to achieve the "transformation" (Post 4).* The entrepreneur's emotional state was also successfully tempered by a change of outlook on situations and showing acceptance:

- *It was tough but necessary (Post 4).*
- *I think this is a period of transition, it is necessary to do the change (Post 4).*

At the same time, the dominant logic of action during this first phase was effectual. Effectuation meant that the object was still under construction, and the opportunity was not a clear objective and could change. The focus in this phase was on available resources. In this environment, he has to make small iterations, to see who wants to build the project with him, who are the potential partners with whom he can interact. In this study, the entrepreneur had an idea to take over an organization in the renewable energy market but needed to check the availability of resources after starting initial contact with some classic public institutions. The decision to contact those institutional resources could be considered as starting with means at disposal, and looked for available resources (people, money, time) through institutional networks. The entrepreneur obtained an unemployment subsidy for 700 days through an institutional network for the takeover project. This situation corresponded to the effectual principle of affordable loss, in which the entrepreneur took into consideration the amount of resources (time, money) that he agreed could be lost. In this case, it represented 700 days (time) to succeed in the takeover:

- *I have 700 days of subsidy. I will do my best to do the takeover in less time than 700 days! (Affordable loss, Post 4).*

The entrepreneur also tried to integrate people in an effectual way to participate in the project. This behaviour corresponds to the crazy quilt principle. According to Sarasvathy *et al.* (2014), an effectual approach calls for entrepreneurs to rapidly engage in conversations with a variety of people they already know or meet, some of whom end up making actual commitments to the new venture (see also Read and Sarasvathy, 2005). Effectual entrepreneurs seek to create avenues for stakeholder self-selection (pre-commitment). The entrepreneur actively engaged in the search for partners, among them G., who is referred to as a "potential associate":

- *Last Monday, we talked during for 4 hours (pre-commitment, Post 4).*
- *I'm sure that we are complementary and we both have an interest in this collaboration (pre-commitment, Post 4).*

According to the analysis of the blog, the entrepreneur developed effectual processes during the first phase (1a). At the same time, verbatims associated with the feelings of the entrepreneur show the presence of emotional resilience to cope with the stressful situations of this phase.

Phase 2 (Posts 21 to 25)

The association between emotional resilience and effectuation is also identified during the first attempted takeover (Phase 2). The entrepreneur tried to transform the owner of the considered organization into an effectual partner for the project (means oriented “who you are” and pre-commitment):

- *During the second meeting, I tried to understand if the owner could see me taking his place. I also remained open to collect all pieces of information possible through our talk (Post 22).*

However, the entrepreneur saw difficulties in the relationship:

- *Simply because I think the owner has made the organization in his own image, and if it doesn't work between us, it is impossible that it will work between the employees and me (Post 21).*

The entrepreneur then decided to anticipate failure of the operation and advanced emotional resilience. According to Waugh *et al.* (2008a), the anticipation of potential failure corresponds to a resilient behaviour:

- *I'm thinking about what I'm going to do if I cannot conclude this operation in Nantes (Post 23).*

Anticipation helps to manage negative emotions in the face of a possible failure. When failure occurred, the entrepreneur continued to appear optimistic, even with Post 25 being published two days after the expected date (necessary time to recover from frustration):

- *That's the way it is, but I have learned a lot with this operation in Nantes (Post 25).*

Phase 4 (Posts 45 to 50)

The analysis of the blog shows that the relationship between emotional resilience and effectual logic was present during Phase 4. At that moment, the entrepreneur found the right organization to take over and then needed to organise the transition. Both the buyer and the seller agreed to work together (pre-commitment), but the situation was stressful:

- *I imagine that it is stressful for him as it is for me, I'm a little stressed (Post 48).*

The stress was counterbalanced by positive emotions (emotional resilience) and anticipation of the event.

- *I remain nevertheless determined and ready to commit to the project!!; It's achievable!!; The great leap into the unknown! (Post 48).*

The anticipation is reflected in the emotional stability that Eloir showed when signing:

- *It was an important moment, but I was not as moved as I expected. No tears, no pinching heart at the time of signing, the signature simply strengthened my determination to complete the buyout project, to join the team in place and make them part of the company's growth. (Post 49).*

Once the emotional aspect was settled through resilience, he started again on a causal logic (*From now on I have four main objectives in view*). It thus appears that the emotional resilience is a safety valve to regulate emotions when stress becomes too important.

Phase 5b (Posts 60 to 63)

Two other phases presented relationships between emotional resilience and effectuation. Both concerned difficulties with obtaining funding for the operation. During the first one (Phase 5b), the public institution that should have guaranteed the loan refused to do so. Faced with this problem, the entrepreneur developed an effectual reaction by immediately contacting the institution to try to understand the refusal and find a solution to the problem. This reaction can be interpreted as an effectual principle where the entrepreneur is capable of changing the environment instead of accepting the situation. The network was contacted to acquire more information about this refusal:

- *I contacted the Regional Council to see if they had more information than me (means oriented “whom you know” and leveraging contingencies, Post 60).*

Several other references about the effectual network (pre-commitment and leveraging contingencies) are identified in the discourse:

- *After all, a bank is continuing to believe in the project and to support me. I will thank her when the time comes (Post 60).*
- *By the way, I also thanked “my” transferor for his support in this rather difficult phase. (...) His support is paramount (Post 60).*

The rapid recovery process and the positive emotion (faith) showed emotional resilience:

- *When you hear this answer over the phone, after 6 months of working on the feasibility of taking over the business, you have to be strong to want to continue without getting discouraged! Keep faith in all circumstances! (Post 60).*
- *That is what I did, well determined not to give up! (Post 60).*

Phase 5d (Posts 69 to 78)

The last effectual phase corresponded to the stress created by the timing for the loan. Indeed, the loan was needed during the month of August and it was late summer time in France with institutions either closed or working less hours. However, the entrepreneur tried to be proactive (means oriented “whom you know” and leveraging contingencies) and accelerate the process. Showing patience (emotional adjustment), the entrepreneur adapted his behaviour to the situation and also took a short vacation (lemonade principle):

- *I wrote it: patience is a virtue!! (Post 71).*
- *I took one week vacation during which I tried to contact the bank branch to find out what was going on with the loan offer (Post 71).*
- *I took advantage of the summer to advance on product marketing, a new website, setting up a server and an EBP network version. What happiness! (Post 72).*

Over all the process, we can identify effectual behaviours supported by emotional resilience. Considering this, we can advance our first proposition: *Emotional resilience allows the development of effectual logics of action.*

Indeed, effectuation appears when there is a strong perception of an uncertain environment (Reymen *et al.*, 2015). This study shows that when the environment is uncertain (following a contradictory event), the shift to effectuation and the development of heuristics need a stable emotional state to compensate for the instability of the environment. Emotional stability seems then necessary for the development of the effectuation.

Cognitive resilience and causal logic

Throughout the blog, it seems that cognitive resilience appears whenever the entrepreneur develops a causal strategy.

Phase 1b (Posts 5 to 20)

During the first phase the entrepreneur understood the complexity of the market and the fact that in the Paris region there are more entrepreneurs searching for companies than companies on sale. He also saw the difficulty of discovering those opportunities. This new and unexpected piece of information created stress:

- *I have arrived at an important information juncture. The takeover market is imbalanced in Paris, there are more buyers than sellers (Post 5).*

To counterbalance the stress, during the first phase (Phase 1a), the entrepreneur controlled emotions by developing emotional resilience. Then, once emotions became stable cognitive resilience emerged. Cognitive resources are easily developed in stable emotional states (Frederickson *et al.*, 2003; Byrne and Shepherd, 2015) and are linked to “the enthusiasm with which entrepreneurs form positive judgments” (Hayward *et al.*, 2010). Through cognitive resilience, the entrepreneur started thinking about the problems of the takeover. Cognitive resilience enlarges the scope of possibilities as explained in the Broad and Build theory of Fredrickson (2003), and broadens the scope of attention and performance.

Cognitive resilience was initially oriented towards a causal strategy with the entrepreneur lacking the business know-how to take over an organization in the sustainable energy industry and had to find the means to reach the fixed objectives by first looking for training courses to help him (goal-orientation “starting with ends”):

- *Training at the CRA (Center for Business Takeover) should provide me with some elements necessary to answer these questions (Post 5).*
- *I am also looking for a “climate engineering” training to give credibility to my application (Post 7).*

The entrepreneur decided to pursue a training course on takeover (CRA training). During the four weeks training, he learned about management. A causal orientation emerged, and the objectives were clearly explained (goal-orientation “starting with ends”). At that moment, the entrepreneur also broadened the search to include companies beyond the Paris region:

- *Here are all my targets: a SME in the heating sector with a turnover of between 1 and 3 M € therefore between 10 and 30 employees located anywhere in France except in the North and East (I estimated that there were about 200 to 300 companies likely to be sold in France) (Post 13).*
- *A difficult part of my business takeover project starts, which will determine its success because it is the first step: the one during which it is necessary to find companies that correspond to the desired target (goal-oriented, Post 13).*

To reinforce the idea of a causal strategy (planned), a comparison to a sportive marathon or hunting is made. The entrepreneur described this causal strategy as a “hunting technique” (Post 13). G is also integrated in the discourse in a causal way without considering if G needs to be convinced (see Step 1.a). G is considered inside the project (goal-orientation “starting with ends”).

- *I believe in the coherence of the business plan I mentioned to you last week, in our capacity with G. to manage this type of business and to develop it, and I do so without exaggerating, and without false modesty (Post 13).*

From that moment, Eloir showed cognitive flexibility in the way he considered information. New information is integrated into his thought process or is eliminated according to whether it allows him to advance or not. The ability to select information and know how to eliminate the least important (irrelevant information) is considered as one of the characteristics of cognitive flexibility (Genet and Siemer, 2011, Isen, 2001, Miyake *et al.*, 2000):

- *Sometimes you have to know how to go fast, but you also have to know how to take your time ... (...) And then, I'm always suspicious of (false) good first impressions (inhibition, Post 17).*

Two main aspects showed the flexibility of Eloir's thought process: (1) the search for technical training enabling him to acquire the necessary knowledge for the takeover, and (2) the selection of files.

1. To take over a business in heating, Eloir initially thought that it was better for him to acquire technical knowledge (taking into account relevant information):

- *This is one of the cornerstones of the takeover project and especially of commercial development; The more I talk about it around me, the more I realize that it is crucial to have the technical control, not only for the commercial offer but also for the management of the organization (Post 16).*

This allowed him to be less dependent on his future employees or partners (avoiding contingencies):

- *Training (...) would give me the technical and commercial dimension which would allow me to concentrate on the management and the commercial aspects of the business and not to depend at a technical level either on a specific employee or on the training carried out by the transferor (Post 16).*

He made an evaluation of the different information he obtained during different technical training courses, comparing the advantages and disadvantages of each (level of training, location):

- *The trainings offered vary in their level and duration but revolve around the desired subject: heating! (taking into account of information, Post 16).*
- *I always hesitate between 2 levels of training. I already addressed the subject a few months ago on this blog and have still not managed to decide: basic training or more "advanced" training? (switching between information, Post 16).*

2. Secondly, when selecting the files, he added the financial aspects (learned during the training), and also the human factors. This integration was the result of a discussion he had had earlier with another entrepreneur about the importance of such information. Those aspects were then integrated into the reflection of Eloir:

- *Last week, I visited a buyer who confirmed what was said: the success of the takeover depends essentially on the human factor (taking into account relevant information, Post 17).*
- *Balance sheets and profit and loss accounts do not explain the culture of an organization, neither the human relations nor know-how ... (taking into account relevant information, Post 17).*

Cognitive resilience seems then to reinforce causal thinking by shifting between new information and objectives. At the end of this phase, a firm in Nantes was selected.

Phase 3 (Posts 26 to 44)

After the failure of the takeover of Nantes (Phase 2), the entrepreneur came back to a causal logic and questioned the final objective (starting with ends) and the rentability of the market (analysing expected returns):

- *The initial objective was to work at the local level in renewable energies for two reasons: this is a market that will have sustained growth in the years to come; It is urgent to act for the planet and to get personally involved (Post 28).*
- *The search for a heating / plumbing organization represents for me the coherent strategic solution that allows living until this market reaches a sufficient degree of maturity (Post 28).*

During this phase, the entrepreneur experimented with cognitive resilience (about wants and conditions), and was causal. Cognitive resilience appeared in the way Eloir indicated how he selected firms by trying to take relevant information and eliminating irrelevant ones (shifting):

- *It is essential to remain realistic, to see the positive points of each file and to try to anticipate the negative ones and at some point to stop thinking and to move forward because there is no ideal business (switching between information, Post 27).*

Like in Phase 1b, this cognitive resilience leads to a causal way of thinking:

- *In this case, what return should be expected from an investment in an SME? 10, 15, 20 or 25 per cent ? It seems reasonable to expect at least between 10 and 15 per cent with regards to the level of risk (Expected return, Post 30).*
- *Market research determines, in particular, the business plan assumptions and must reassure the buyer on his/her understanding of the activity of the target organization (especially when it is not from the sector). (doing competitive analysis, Post 39).*

This causal phase drove the entrepreneur to a new prospect, an organization near Bordeaux, which proved to be a good fit. The blog entries show causal thinking in this phase:

- *The questions on which we had to agree were: What is the value for the transferor? How much is it theoretically worth? (through the different financial methods available); How much can I pay considering the parameters related to the financing (personal contribution, participation or not of the transferor, possibility of debt ...) And in the end, according to the different preceding parameters, how far am I willing to go as a buyer and willing to accept? After a few hours of negotiation, we finally agreed on a price (expected return and avoiding contingencies, Post 42).*
- *I still have to close the takeover Business Plan with, in particular, the market research part, the provisional income statements, the financing plan, and the cash flow plan (Goal-oriented, Post 42).*

Phases 5a and 5c (Posts 51 to 59 and 64 to 68)

The last two phases corresponded to causal periods during which the entrepreneur tried to find funding for the operation (goal-orientation, starting with ends):

- *I had a series of meetings with banks this week (...) As I announced last week, I presented a complete project, built on four parts: (the entrepreneur, the organization and its market, the forecast and the financial elements) (Starting with ends, Post 53).*
- *I will also see the bank to fix the final points and agree on a closing date. I really hope that there will be no last-minute surprise ... (avoiding contingencies, Post 64).*

During these two periods, there was also a cognitive resilience in the way the entrepreneur asked questions about the problems and considered solutions:

- *I do not understand the reasoning behind this refusal (Inhibition, Post 58).*

- *Even if the CRA training is interesting, there are so many details that it is essential to be accompanied! (taking into account relevant information, Post 66).*

From those observations, we propose a second proposition: *Cognitive resilience is often related to causal principles of action.* Indeed, cognitive flexibility seems to guide causal thinking: the progress of the project and the reduction of uncertainty allow the cognitive flexibility (selection and rejection of contradictory information) that is necessary for a process of causal reflection.

Discussion

In the literature in entrepreneurship, effectuation is defined as a logic of action (Sarasvathy, 2008; Sarasvathy et al., 2014). It assumes that under conditions of uncertainty, entrepreneurs adopt a different operating logic in which the entrepreneurial behaviour is based on the availability of resources rather than on predetermined objectives. Also, adversity and uncertainty are overcome by the development of resilience (Bullough et al., 2014; Sutcliffe and Vogus, 2003). Therefore, the entrepreneur needs resilient attitudes and effectual behaviours to deal with uncertainty.

Following Gartner (1988), this study analyzes the interaction between the dancer (entrepreneur) and the dance (logic of action), assuming that the change of logic of action is favored by certain individual characteristics. The aim of this study is to understand the change of logic of action (Sarasvathy, 2001; Alsos et al., 2016; Engel et al., 2014). How does the entrepreneur make a change of logic and what dimensions of psychological resilience appear during the process?

The entrepreneurship literature emphasizes that the preference between causal and effectual actions is strongly related to the choices the entrepreneur makes in uncertainty (McMullen and Shepherd, 2006). From this perspective, some individual characteristics influence the effectual process such as expertise (McKelvie et al., 2011, Dew et al., 2009; Read et al., 2009), self-efficacy (Engel et al., 2014), and social identity (Alsos et al., 2016, York et al., 2016). York et al. (2016) also emphasize that the less clear the goal for the individual, the more effectual the decision will be.

This study identifies forms of resilience during the business takeover process that helped the entrepreneur overcome adversity and shift between causal and effectual logics. Results show that the level of uncertainty around the project varies over time. There are stress phases that the entrepreneur must control. The ability to control the stress has its origin in the resilience of the entrepreneur. In this study, the resilience of the individual (a component of psychological capital) facilitates the change of logic and the development of effectuation, improving the adaptation to complex and uncertain situations.

However, the literature also shows that the effectual principles improve the resilience of individuals and organizations. The ability to adapt to uncertain situations has its origin in the setting up of certain logics of action (Maine et al., 2015). Resilience and effectuation are then in interaction. This study shows how different dimensions of resilience are dynamically connected to different logics of actions allowing the development of a successful entrepreneurial project.

Conclusion

For individuals creating or taking over a business, one crucial aspect is how to deal with uncertainty. This study can help entrepreneurs to succeed in a business creation or takeover by improving knowledge of the relationship between resilience and logics of actions. It sheds light on the way to overcome adversity during the start-up process. It seems that emotional resilience, the capacity of the individual to regulate emotions during periods of stress, enables the necessary space to develop cognitive resilience (cognitive adaptation to solve a problem).

From a theoretical point of view, this study suggests a process for entrepreneurial resilience. In entrepreneurship, resilience is traditionally considered a characteristic that allows serial entrepreneurs to create new ventures after failure (Bullough et al., 2014). The analysis of the entrepreneurial takeover shows that factors of resilience are present throughout all stages of the process (opportunity recognition, negotiation, and financing). Therefore, resilience allows the individual to continue the entrepreneurial process after each obstacle, and can help reducing failure. This study also complements the literature on logics of action. Effectuation and causation are complementary behaviours (Sarasvathy, 2001; Read et al., 2009; Fischer, 2012; Reymen et al., 2015; Smolka et al., 2016). The shift between effectuation and causation logics has been explained through different aspects, however, how this change occurs has not been investigated. Since resilience is the propensity to act under adversity (Bullough et al., 2014) through regulation of emotions and expansion of cognitive structures and thoughts (Byrne and Shepherd, 2015; Genet and Siemer, 2011), it can allow us to understand how entrepreneurs react when uncertainty rises, navigating between different logics of action.

To extend the understanding of entrepreneurial resilience and logics of action, it can be interesting to analyse the development of resilience with respect to the various entrepreneur profiles. In this study, the age and human capital (level of education and managerial experience) of the entrepreneur perfectly match the literature on entrepreneurial takeovers according to which buyers have more managerial experience and a higher average age than creators (Bastié et al., 2013; Block et al., 2013). But, what happens in the case of a new venture creation? If resilience is learned through life experiences (de Vries and Shields, 2006), there may be a relationship between entrepreneur profiles, learning, experience, and the development of resilience. Also, experienced entrepreneurs develop more effectual approaches than causal. We can then ask if managers, in the middle of their working careers, will be able to develop resilient characteristics and effectual processes more easily than other individuals. How to help young entrepreneurs to be more resilient and flexible to succeed a business creation? These are some of the new questions that arise from our study, and that could become interesting topics of research.

Finally, this research was exploratory, and evidence was collected from a single source: a French blog. Although this can ensure the reliability of the results, it potentially limits their generalizability. The blog may not adequately reflect the experiences of the entrepreneur because he decided on what he wrote about. In this study, it was not possible to orient the entrepreneur to describe a fact nor to ask him for more information. The analysis was limited to the information shared by the entrepreneur in his blog. The blog is written data, and in this way, it is considered an approximative reflection for the understanding of the studied behaviours. However, the blog is

rich in description of the feelings expressed by the entrepreneur at the different moments of the process; this information was useful to understand resilience.

References

- Alvarez, S.A. and Barney, J.B. (2007), "Discovery and creation: alternative theories of entrepreneurial action", *Strategic Entrepreneurship Journal*, Vol. 1 No. 1-2, pp. 11–26.
- Alsos, G.A., Clausen, T.H., Hytti, U., and Solvoll, S. (2016), "Entrepreneurs' social identity and the preference of causal and effectual behaviours in start-up processes", *Entrepreneurship & Regional Development*, Vol. 28 No. 3-4, pp. 234–258.
- Ayala, J.-C. and Manzano, G. (2014), "The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis", *Journal of Economic Psychology*, Vol. 42, pp. 126–135.
- Bastié, F., Cieply, S., and Cussy, P. (2013), "The entrepreneur's mode of entry: The effect of social and financial capital", *Small Business Economics*, Vol. 40 No. 4, pp. 865–877.
- Baxter, L.A. (1991), Content Analysis. In: Montgomery, B.M., Duck, S. (Eds.), *Studying Interpersonal Interaction*, New York, London, The Guilford Press, pp 239-254.
- Bernard, H. R. and Ryan, G. W. (2009), *Analyzing Qualitative Data: Systematic Approaches* (2 ed.), Thousand Oaks, CA: Sage Publications.
- Bhowmick, S. (2011), "Effectuation and the dialectic of control", *Small Enterprise Research*, Vol. 18 No. 1, pp. 51-62.
- Bird, B. (1988), "Implementing entrepreneurial ideas: The case for intention", *Academy of Management Review*, Vol. 13 No 3, pp. 442-453.
- Block, J., Thurik, R., van der Zwan, P., and Walter, S. (2013), "Business takeover or new venture? Individual and environmental determinants from a cross-country study", *Entrepreneurship Theory and Practice*, Vol. 37 No. 5, pp. 1099–1121.
- Bullough, A., Renko, M., and Myatt, T. (2014), "Danger zone entrepreneurs: The importance of resilience and self-efficacy for entrepreneurial intentions", *Entrepreneurship: Theory and Practice*, Vol. 38 No. 3, pp. 473–499.
- Byrne, O. and Shepherd, D.A. (2015), "Different Strokes for Different Folks: Entrepreneurial Narratives of Emotion, Cognition, and Making Sense of Business Failure", *Entrepreneurship, Theory and Practice*, Vol. 39 No. 2, pp. 375-405.
- Chandler, G.N., DeTienne D.R., McKelvie A., and Mumford T.V. (2011), "Causation and Effectuation Processes: A Validation Study", *Journal of Business Venturing*, Vol. 26 No. 3, pp. 375-390.
- Cope, J. (2005), "Toward a dynamic learning perspective of entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 29 No. 4, pp. 373-397.
- Corbin, J. and Strauss, A. (2008), *Basics of Qualitative Research*, Sage, 3rd ed., Thousand Oaks.
- Coutu, D. L. (2002), "How Resilience works", *Harvard Business Review*, Vol. 80, pp. 46-55.
- de Vries, H.P. and Shields, M. (2006), "Towards a theory of entrepreneurial resilience: an analysis of New Zealand SME owner–operators", *The New Zealand Journal of Applied Business Research*, Vol. 5 No. 1, pp. 33-44.
- Dew, N., Read, S., Sarasvathy, S.D., and Wiltbank, R. (2009), "Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices", *Journal of Business Venturing*, Vol. 24, pp.287–309.
- Dewald, J. and Bowens, F. (2010), "Storm Clouds and Silver Linings: Responding to Disruptive Innovations Through Cognitive Resilience", *Entrepreneurship, Theory and Practice*, Vol. 34 No. 1, pp.197-218.

- Eisenhard, K. and Graebner, M. (2007), "Theory building from cases: Opportunities and challenges", *Academy of Management Journal*, Vol. 50, pp. 25–32.
- Elliot, J. (2005), *Using Narrative in Social Research: Qualitative and Quantitative Approaches*, Sage, Thousand Oaks, CA.
- Engel, Y, Dimitrova, N.G., Khapova, S.N., and Elfring, T. (2014), "Uncertain but able: Entrepreneurial self-efficacy and novices' use of expert decision-logic under uncertainty", *Journal of Business Venturing Insights*, Vol. 1-2, pp. 12–17.
- Fayolle, A. (2004), *Entrepreneuriat, apprendre à entreprendre*, Dunod.
- Fisher, G. (2012), "Effectuation, Causation, and Bricolage: A Behavioral Comparison of Emerging Theories, Entrepreneurship Research", *Entrepreneurship Theory and Practice*, Vol. 36 No. 5, pp. 1019-1051.
- Fisher, R., Maritz, A., and Lobo A. (2016), Does individual resilience influence entrepreneurial success?, *Academy of Entrepreneurship Journal*, Vol. 22 No. 2, pp. 39-53.
- Fredrickson, B.L. (1998), "What good are positive emotions?", *Review of General Psychology*, Vol. 2 No. 3, pp.300–319.
- Fredrickson, B.L. (2001), "The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions", *American Psychologist*, Vol. 56 No. 3, pp.218–226.
- Fredrickson, B.L. and Branigan, C.A. (2005), "Positive emotions broaden the scope of attention and thought—action repertoires", *Cognition and Emotion*, Vol. 19 No. 3, pp.313–332.
- Fredrickson, B.L., Tugade, M.M., Waugh, C.E., and Larkin, G. (2003), "What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001", *Journal of Personality and Social Psychology*, Vol. 84 No. 2, pp.365–376.
- Gabrielsson, J. and Politis, D. (2009), "Career motives and entrepreneurial decision-making: examining preferences for causal and effectual logics in the early stage of new ventures", *Small Business Economics*, Vol. 36 No.3, pp. 281-298.
- Gartner, W. (2007), "Entrepreneurial narrative and a science of the imagination", *Journal of Business Venturing*, Vol. 22 No. 5, pp. 613-627.
- Gartner, W. B. (1988), "Who is an entrepreneur? is the wrong question", *American Journal of Small Business*, Vol. 12 No. 4, pp. 11-32.
- Genet, J.J. and Siemer, M. (2011), "Flexible control in processing affective and non-affective material predicts individual differences in trait resilience", *Cognition and Emotion*, Vol. 25 No. 2, pp. 380-388.
- Graneheim, U.H. and Lundman, B. (2004), "Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness", *Nurse Education Today*, Vol. 24 No. 2, pp. 105-12.
- Gross, J. J. (Ed.) (2007), *Handbook of emotion regulation*, New York: Guilford Press.
- Harms, R. and Schiele, H. (2012), "Antecedents and consequences of effectuation and causation in the international new venture creation process", *Journal of International Entrepreneurship*, Vol.10 No. 2, pp. 95–116.
- Hayward, M., Forster, W.R., Sarasvathy, S.D., and Fredrickson, B.L. (2010), "Beyond hubris: How highly confident entrepreneurs rebound to venture again", *Journal of Business Venturing*, Vol. 25 No. 6, pp. 569–578.
- Hinchman, L. and Hinchman, S. (1997), *Memory, Identity, and Community: The Idea of Narrative in the Human Sciences*, State University of New York, New York.
- Hindle, K. (2004), "Choosing qualitative methods for entrepreneurial cognition research: A canonical development approach", *Entrepreneurship: Theory and Practice*, Vol. 28 No. 6, pp. 575–607.
- Isen, A. M. (2002), "Missing in action in the AIM: Positive affect's facilitation of cognitive flexibility, innovation, and problem solving", *Psychological Inquiry*, Vol. 13 No. 1, pp. 57-65.

- Isen, A.M. (2001), An Influence of Positive Affect on Decision Making in Complex Situations: Theoretical Issues With Practical Implications, *Journal Of Consumer Psychology*, Vol. 11 No. 2, pp.75–85.
- Kovach, C.R. (1991), “Content analysis of reminiscences of elderly women”, *Research in Nursing & Health*, Vol. 14 No. 4, pp. 287–295.
- Linnenluecke, M.K. (2015), “Resilience in business and management research: A review of influential publications and a research agenda”, *International Journal of Management Reviews*, Vol. 19 No. 4, pp. 4-30.
- Luthans, F., Avolio, B.J., Avey, J.B., and Norman, S.M. (2007), “Positive psychological capital: measurement and relationship with performance and satisfaction”, *Personnel Psychology*, Vol. 60, pp. 541–572.
- Maine, E., Pek-Hooi Soh, P-H., and Dos Santos, N. (2015), “The role of entrepreneurial decision-making in opportunity creation and recognition”, *Technovation*, Vol. 39–40, May–June, pp. 53-72.
- Masten, A. S. (2001), “Ordinary magic: Resilience process in development”, *American Psychologist*, Vol. 56 No. 3, pp. 227-239.
- McKelvie, A., Haynie, J.M., and Gustavsson, V. (2011), “Unpacking the uncertainty construct: Implications for entrepreneurial action”, *Journal of Business Venturing*, Vol. 26 No. 3, pp. 273-292.
- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, Sage, Thousand Oaks.
- Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., and Howerter, A. (2000), “The unity and diversity of executive functions and their contributions to complex “frontal lobe” tasks: A latent variable analysis”, *Cognitive Psychology*, Vol. 41, pp.49-100.
- Nardi, B.A, Schiano, D.J., and Gumbrecht, M, (2004), “Blogging as social activity, or, would you let 900 million people read Your Diary?”, in Proceedings of ACF Conference on Computer supported Cooperative Work 2004, Vol. 6, No. 3, pp. 222-231, available at: http://www.artifex.org/~bonnie/pdf/Nardi_blog_social_activity.pdf (accessed 31 March 2017).
- Nath, P. and Pradhan, R.K. (2012), “Influence of Positive Affect on Physical Health and Psychological Well-Being: Examining the Mediating Role of Psychological Resilience”, *Journal of Health Management*, Vol. 14 No. 2, pp. 161–174.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., and Wallace, K. A. (2006), “Psychological resilience, positive emotions, and successful adaptation to stress in later life”, *Journal of Personality and Social Psychology*, Vol. 91 No. 4, pp.730-749.
- Poynter, R. (2010), *The Handbook of Online and Social Media Research: Tools and Techniques for Market Researchers*, John Wiley & Sons.
- Rae, D. (2000), “Understanding Entrepreneurial Learning: A Question of How?”, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 6 No. 3, pp. 145-159.
- Read, S. and Sarasvathy, S.D. (2005), “Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise”, *The Journal of Private Equity*, Vol. 9 No. 1, pp. 45–62.
- Read, S., Dew, N., Sarasvathy, S.D., Song, M., and Wiltbank, R. (2009), “Marketing under Uncertainty: The Logic of Effectual Approach”, *Journal of Marketing*, Vol. 73 No. 3, pp.1-18.
- Reymen, I., Andries, P., Berends, H., Mauer, R., Stephan, U., and Van Burg, E. (2015), “Understanding dynamics of strategic decision-making in venture creation: A process study of effectuation and causation”, *Strategic Entrepreneurship Journal*, Vol. 9 No. 4, pp.351-379.
- Richards, L. (2009), *Handling Qualitative Data*, Sage, Thousand Oaks, CA.
- Ricoeur, P. (1983), *Temps et récit*, Le Seuil, trois tomes, 1983 – 1985, Paris.
- Sarasvathy, S.D. (2001), “Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency ”, *Academy of Management Review*, Vol. 26 No. 2, pp. 243–263.

Sarasvathy, S.D. (2008), *Effectuation of Entrepreneurial Expertise*, Edward Elgar.

Sarasvathy, S.D., Kumar, K., York, J.G., and Bhagavatula, S. (2014), “An effectual approach to international entrepreneurship: Overlaps, challenges, and provocative possibilities”, *Entrepreneurship: Theory and Practice*, Vol. 38 No. 1, pp. 71–93.

Smolka, K. M., Verheul, I., Burmeister-Lamp, K., and Heugens, P. P.M.A.R. (2016), “Get It Together! Synergistic Effects of Causal and Effectual Decision-Making Logics on Venture Performance”, *Entrepreneurship Theory and Practice*, doi: 10.1111/etap.12266.

Steyaert, C. and Bouwen, R. (1997), “Telling stories of entrepreneurship – towards a narrative-contextual epistemology for entrepreneurial studies”, in Donckels, R. and Miettinen, A., *Entrepreneurship and SME Research: On its Way to the Next Millenium*, Aldershot, Ashgate, pp. 47-62.

Sutcliffe, K.M. and Vogus, T.J. (2003), “Organizing for resilience”, In: Cameron, K.S., Dutton, D.E., Quinn, R.E. (Eds.), *Positive Organizational Scholarship: Foundations of a New Discipline*, pp. 94–110.

Tugade, M.M. and Fredrickson, B.L. (2004), “Resilient individuals use positive emotions to bounce back from negative emotional experiences”, *Journal of Personality and Social Psychology*, Vol. 86 No. 2, pp. 320–333.

Venkataraman, S., Sarasvathy, S., Dew, N., and Forster, W. (2013), “Of narratives and artifacts”, *Academy of Management Review*, Vol. 38, pp. 163-165.

Waugh, C.E., Wager, T.D., Fredrickson, B.L., Noll, D.C., and Taylor, S.F. (2008a), “The neural correlates of trait resilience when anticipating and recovering from threat”, *Social Cognitive and Affective Neuroscience*, Vol. 3 No. 4, pp. 322-332.

Waugh, C.E., Fredrickson, B.L., and Taylor, S.F. (2008b), “Adapting to life’s slings and arrows: individual differences in resilience when recovering from an anticipated threat”, *Journal of Research in Personality*, Vol. 42 No. 1, pp. 1031-1046.

Yanow, D., Ybema, S.B., and van Hulst, M. (2012) “Practising organizational ethnography”. In G. Symon & C. Cassell (Eds.) *Qualitative Organizational Research: Core Methods and Current Challenges* (pp. 351-372). London: Sage.

Yin, R.K. (2003), *Case Study Research: Design and Methods*, Sage Publications, Thousand Oaks.

York, J. G., O’Neil, I., and Sarasvathy, S. D. (2016), “Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives”, *Journal of Management Studies*, Vol. 53 No. 5, pp. 695-737.