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"TIME DYNAMICS IN TEAM ENTREPRENEURIAL PASSION DEVELOPMENT: A CASE STUDY OF STARTUPS IN AN ACCELERATION PROGRAM"

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«I have no special talent. I am only passionately curious»

Albert Einstein

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INTRODUCTION

Nowadays, the world is *changing at a fast pace*. Large industrial companies are experiencing performance decrease. Information Technology represents one of the drivers of world economic growth. The economic and social context in which people and businesses are embedded in is changing. And its changing quickly. Only entrepreneurs and workers who are able to adapt and keep the pace with this dynamic context are able to successfully perform in the economic environment.

Startups represent one of the main growth drivers for the world economy. This is due to the business' innovative and disruptive content and to the high risk-taker nature of the entrepreneur. Startups are extremely relevant in driving economic growth and in creating new jobs, as they balance out job losses due to technological improvements in industrial companies. These new ventures enhance the *proactivity* of the society, who wants to be part of the creation of value. Future economic growth and societal prosperity depend on the present level of investments in innovation. Startups represent the main driver in creating innovative solutions to existing or potential needs as they are characterized by a strong focus on innovation and solid ambitions for growth, which represent a competitive advantage with respect to large corporations. Thus, startups are extremely important (Compass, 2015). However, the failure rate of this type of entity is extremely high. Even though data depend on the definition given to startup failure, empirical evidence confirms the rule of thumb claiming that out of ten startups, only three or four fail completely, while another three or four only return the initial investment and one or two produce high returns on investments and can be defined as successful (Rose, 2015). Five elements have been identified as success drivers for startups (Gross, 2015): a) the entrepreneurial idea; b) the team and its ability to perform a customer-focused execution; c) the business model and a clear path for revenue generation; d) an appropriate amount of funding; e) the correct timing of the market entry and the ability to educate the consumer to use the product.

When matching these drivers with the elements considered by *external investors* in the decision of investing funds in a startup, the team and the entrepreneurial passion of the co-founders emerge to be among the most relevant drivers.

In such context, research on emotions related to entrepreneurship is a priority, especially focused on new ventures and startups. Recently, academic literature and managerial research have started to focus on emotion-related topics as entrepreneurship is considered as an emotional journey, calling for further research. Both long-term and short-term emotions are extremely relevant in driving entrepreneurial effort and affect is likely to emerge in all stages of the entrepreneurial process (Cardon, Foo, Shepherd, & Wiklund, 2012). Passion is one of the intangible assets driving entrepreneurs, getting them through challenges and difficulties, leading a business to success. Even though academic literature on entrepreneurial passion, both at individual and team level, is available, this is still underdeveloped and it lacks of empirical qualitative studies in differing contexts. Moreover, research has focused mainly on emotional aspects related to the earliest stage of a new venture, determined by the idea identification, or on those involved with the business failure. No relevant studies have been conducted on how emotions

influence the entrepreneurial process in the middle, between the idea and the exit. Thus, we have considered relevant to thoroughly understand *team development over time, the emergence and the influence of entrepreneurial passion at team level*, specifically considering the time perspective. In fact, startups are characterized by high pace dynamics and timing related to decision-making and to business execution is critical for the successful growth of these entities.

Team Entrepreneurial Passion is still a little explored area of emotion-related management in academic research, even though it is extremely relevant for startups to achieve a successful fundraising campaign and to reduce the risk of failure of the business. In fact, this construct combines two *elements of success factors of a startup*: the team and the emotion-related element of entrepreneurial passion.

The present dissertation aims to understand the *impact of time-related elements on the development of Team Entrepreneurial Passion and on its rhythm*, by observing nine startups participating in an acceleration program.

This thesis is structured in five chapters. In *Chapter One* an overview of the startup environment is provided, starting with a general approach to the global phenomenon up to a more detailed explanation of the startup as business entity. After introducing the different definitions of startups (or start-ups), the phenomenon of the increasing importance of startups is described, followed by an illustration of the main characteristics of the startup ecosystem. Finally, the point of attention shifts to the startup as business entity, focusing on the description of the organization's startup lifecycle, on the fundraising stage, on success factors and on failure reasons.

Chapter Two provides a literature review on Entrepreneurial Passion at both team and individual level and on the processes involved in the Conceptual Model of emergence and influence of Team Entrepreneurial Passion (Cardon, Post & Forster, 2016).

Chapter Three focuses on new venture teams, such as startups, and time impact on their internal dynamics. Initially, an overview on entrepreneurial and startup teams is provided. To follow, a literature review is performed on the different development stages groups generally go through. To better understand the impact of time on team processes, behaviors and emotions, the chapter will focus on the most relevant theoretical models used by scholars to analyze time evolution in teams. In order to integrate some concepts introduced by these models, a literature overview is provided on the time pressure impact on team dynamics and on the impact of deadlines and temporary on team performance. *Chapter Four* presents the research model applied in order to analyze our case study, which describes team dynamics within startups participating to an acceleration program in H-FARM, over a period of three months. The data analysis of our qualitative research focuses on the dynamic parts of the conceptual model of TEP, such as bottom-up and top-down affective and identity processes, integrated by the observance of additional elements which may impact on the emergence of TEP and on its influence on team members. The analysis of the case study has been performed in order to enable the emergence of time-related elements.

To follow the data analysis, *Chapter Five* reports the main findings and conclusions of this dissertation, by discussing theoretical implications, further research suggestions and managerial implications of the dissertation.

CHAPTER 1

THE CONTEXT: THE STARTUP ECOSYSTEM

1.1 Introduction

Startups have been attracting increasing media interest and attention of experts, scholars, policy makers and business people since the beginning of this decade. The diffusion of Information and Communication Technologies (ICTs) and the growing importance of business networks as key element of corporations have contributed to increase the interest of institutions and people on startups. New business ventures characterized by innovation and high growth are the drivers for economy's innovation, for productivity growth and for better quality jobs creation. These entities can also contribute to social and economic structural change, thanks to the introduction of new knowledge-intensive products and services with high-technological content. Startups are a relevant phenomenon, reason why it is important to study these organizations' specific dynamics and success factors.

1.2 Startup definition

Startups are one of the main engines for nowadays' economic renewal and growth of both developed and developing countries (Cusumano, 2013). They represent the most dynamic and important component of a country's productive ecosystem, even if smaller in number and in size compared to other business organizations. In order to better clarify their relevance, there is a need to provide an overview over the term "startup".

Different countries' organizations adopt different definitions of startup, considering them as *new technology-based firms*, or *high-growth firms*, or *ICT-based firms* (OECD Development Centre, 2013). Albeit many definitions of newly created organizations have been developed, there is a lack of consensus on the description of a new business venture creation and on the explaining variables of the phenomenon (Gartner, 1985). Thus, difficulties in finding a single, universal definition of startup arise. These are mainly due to different actors, such as scholars, business experts, investors, etc., focusing on different elements when identifying a startup or, broadly speaking, an emerging organization. The concept of "startup" can be better specified according to different variables. When the focus is on performance, startups are generally considered as *high growth and high impact business ventures*; whereas these are defined as *business ventures providing new solutions to target new demands through innovative business models*, if highlighting the innovative content of the value proposition (OECD Development Centre, 2015). Gartner and Katz (1988) have selected four properties to develop a framework enabling the identification of organizations in the early stages of their creation process: *intention, resources, boundaries between the organization and the environment, and exchanges among subsystems*. In order to apply these properties, a precise definition of organization is required, which is a serious problem for

researchers, as academic literature tends to provide definitions from either a structural or a process point of view. The most suitable *definition of organization* has been identified in McKelvey's, describing it as a *broader system of activities led by a purpose of containing substystems, fostering the survival in particularly challenging environments* (Gartner & Katz, 1988).

1.2.1 Various definitions of startup

The term "startup" should not be confused with *the startup phase of an organization*, reflecting the first stage in the firm's lifecycle, during which the business is firstly launched into the market or acquired and relaunched through a new start up. During this period the entrepreneur or the team defines strategic actions, organizational processes and investments required to outline the business structure, impacting on the long-term: conception of the idea, definition of technical and financial resources required, organizational structure, human resource management and others¹ (Gualandri & Venturelli, 2011). Initially, startups were considered as *highly technological organizations with a focus on Web or digital solutions*. Subsequently, the term has been *extended also to innovative manufacturing organizations*.

There are *various types of startups*, according to their stage of development and their founding background. More than half of the startups is founded only after the validation of the business idea and, better, after initial capital needs have been fullfilled ("wannabe startup"). In 2012, 36% of startups were companies established for maximum 2 years. 5% of startups were represented by new projects promoted by already established companies, implemented as corporate spin-off (Mind The Bridge, 2012).

The most commonly used definition is attributed to Steve Blank, an entrepreneur and academician, who wrote the bestseller *The Startup Owner's Manual*. He considers a startup company (or start-up or start up) as a *temporary organization searching for a rapidly scalable and repeatable business model, in the earliest stages of growth* (Blank, 2010; Blank & Dorf, 2012), which is characterized by a *commitment to innovation* (Mind The Bridge, 2012). The adjective *scalable* refers to a business able to exploit economies of scale, to increase its dimensions, thus its customers and volume of affairs, in an exponential way without the use of a proportional amount of resources. A scalable business model should be replicated in different periods and different contexts, applying only little modifications². The differentiating element between a startup and an exsisting business consists of the effective and efficient search for something unknown, rather than the execution of a known business (Blank & Dorf, 2012). During entrepreneurial workshops held by Lior Frenkel, an Israeli expert of Lean Canvas, CEO of a company helping freelancers to start a business and mentor for H-FARM Accelerator Program, the previously quoted difference is better explained in terms of business model: organizations such as Facebook, Google, Skype, Airbnb have found a repeatable and scalable business model; thus, they are

¹ Economy Up. (2016). Glossario - Start up: http://www.economyup.it/glossario/4298_startup-definizione.htm

² Economy Up. (2016). Glossario - Start up: http://www.economyup.it/glossario/4298_startup-definizione.htm

companies, not startups anymore. A startup is *temporary* as the final goal is to cease being a startup, by quickly scaling-up to a large business or by failing and moving to other opportunities. In order to concretely apply Steve Blank's definition of startup, the *European Startup Monitor*, a network aiming at creating transparency for startups in Europe and Israel³, has identified *three critical features* to be met by a business venture: a) to be younger than 10 years; b) to feature a highly innovative technology or business model; c) to have or strive for a strong employee or sales growth (Kollmann, Stockmann, Linstaedt, & Kensbock, 2015).

In summary, startups are fast-growing young ventures, developed to create wealth.

The creator of the Lean Startup methodology, Eric Ries, shifts the focus on the human component. He considers startups as *institutions with high relevance of the human element, designed to deliver an innovative value under extremely uncertain conditions* (Ries, 2010). The value created by the company is located in the people and in the organization developing it, rather than in the product or service. Startups deliver a "new" type of *value*, consisting of *finding new uses to an existing technology, defining a new business model or changing the distribution channel or the customer segment, in addition to radical product innovation* (Ries, 2010). Startups are experiments on platforms, that test possible automatizations both in business and in daily life. Startups tend to apply known techniques to new processes. Success and failure reasons depend on many different and combined elements (The Economist, 2014). In fact, Lior Frenkel claims that startups must develop *a 5 week strategy* to offer a product or service designed to satisfy user needs (personal communication, May 25th, 2016). Startups are continuously developing organizations, operating *along 5 interdependent areas: customer, product, team, business model and financials* (Marmer, Herrmann, Dogrultan, & Berman, 2012).

Inherent high risk is the common element to all different definitions of "startup". Innovation may result in outperformance and high economic returns. The context of extreme uncertainty in which innovation develops and startups grow cannot be clearly framed and high risk is involved (Ries, 2010). Paul Graham, an American essayist, developer, startup founder and CEO of Y Combinator, one of the most powerful startup accelerators, considers rapid growth possible only if a company makes something a wide range of people want, which is able to reach and serve all the big market. The difference between a start-up and a small business is the fast growth and business scalability of the former (Graham, 2012). The startup's concept is continuously changing and new elements are added. Neil Blumenthal, cofounder and co-CEO of the American eyewear and sunglasses brand Warby Parker, integrates the definition of startup by introducing the concept of problem solving with a non-obvious solution and of not guaranteed success (Robehmed, 2013).

Definitions of startups differ, with variant degrees of specificities and focus, according to the use to be made of it.

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³ European Startup Monitor: http://europeanstartupmonitor.com

The *Organization for Economic Co-operation and* Development (OECD) delineates startups as *economic agents contributing to economic growth and innovation, together with job creation* (OECD Development Centre, 2013). For policy application purpose, OECD refers to startup as young small-medium enterprises employing between 1 and 249 people, taking into consideration size and age as variables (Criscuolo, Gal, & Menon, 2014).

U.S. Small Business Administration (SBA) considers startups as a type of business ventures typically technology-oriented, which present a high growth potential, facing unique challenges, mainly in the financing area.⁴

Mind The Bridge, a global organization bridging the world through entrepreneurship education tailored for startups, enterprises and investors to succeed in global markets⁵, has adopted a more detailed approach to define startups, highlighting four main features: a) entrepreneurial projects or companies of recent foundation; b) operations in innovative sectors; c) strong growth plans; d) high capital injections required in the early stages (Mind The Bridge, 2012). This definition is being adopted by the European Union as part of the Startup Europe Partnership (SEP) to bridge the gap between Europe's startups, corporate, educational organizations and investors⁶

More detailed and criteria-responding definitions are developed by governments, mainly for clear legal applications. For example, following the economic crisis, in 2012 the *Italian Ministry of Economic Development* has issued a paper to make Italy restart through startups, evidencing a topic of increasing importance. The definition provided is very specific. *An Italian startup is an enterprise which has both technological and innovative content, which satisfies the following criteria* (Italian Minister of Economic Development, 2012):

- ii) Not being listed on the stock exchange;
- iii) Residence or being subject to taxation in Italy;
- iv) Fulfillment of the following elements:
- v) Direct or for at least 51% ownership by individuals, both in voting rights and shares of capital;
- vi) Established established for no longer than 48 months;
- vii) No turnover or turnover not exceeding 5 million euros (according to the last approved financial statement);
- viii) No profit distribution; does not distribute profits;
- ix) Social goal: development of innovative goods or services of high technological value or activity in specific social sectors;
- x) Transparent bookkeeping and no use of cash.

The rate of innovation content is measured by the level of Research & Development expenses, number of qualified employees and ownership of patents or registered software.

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⁴U.S. Small Business Administration: https://www.sba.gov/starting-business/how-start-business/business-types/startups-high-growth-businesses

⁵ Mind The Bridge (2016): http://mindthebridge.com/our-story/

⁶ European Commission Digital Single Market Conference - Startup Europe: https://ec.europa.eu/digital-single-marketen/startup-europe

From *Venture Capitalists* viewpoint, startups are companies characterized by the *need of a certain amount of capital to exploit the high growth potential*. Because of the high uncertainty involved, investments in startups are extremely risky and illiquid, capable however of giving very high returns. Moreover, the strong need for financial resources may lead the startup to give the investor the possibility to influence the startup's major decisions (Economic Times, 2016).

Academic literature refers to startups as a type of new venture, facing specific challenges.

Our preferred definition in order to analyze startups highlights the *early stage of development and growth*, during which firms are setting organizational processes and procedures enabling them to develop their first product or service, to launch it in ther market and create a strong customer base.

Startups are high-growth and innovative organizations, searching for a scalable and repeatable business model in an uncertain context.

Because the relevance of the firm's age and size depends on the context and on the industry characteristics, it is not suggested to base the new venture's definition on elements such as age and size (Klotz, Hmieleski, Bradley, & Busenitz, 2014).

1.2.2 Tech-startups

Tech-startups can be considered as a *subcategory of startups*. Nowadays most companies and institutions employ technology to deliver their value proposition. In order to be considered high-tech businesses, it is not sufficient to develop a software or an hardware with technological content to be sold. The necessary element to have is *long-term focus for technological innovation and continuous research and development* (Kerstetter, 2015). One of the most influential Israelian experts of techstartups, Lior Frenkel, considers these as:

businesses searching for a scalable and repeatable business model, potentially producing and selling hardware or software technological products (personal communication, May 25th, 2016).

According to Paul Graham, a distinction must be done between the use of technology to deliver a product or service and creating technology. The former is not a startup. Technology creation within a scalable and repeatable business model is the basic requirement for a technology startup. This subcategory of business organization tends to provide an unique and innovative solution to a hard problem (Graham, 2010).

The startups importance for the global economic and social wealth growth will be better explained in the following paragraph.

1.3 The phenomenon

1.3.1 From Industrial Era to Information Era

Over the last 15 years, worldwide economic growth and job creation has come from high-growth technology startups. Today, *technology entrepreneurship* is a *global phenomenon*, which is becoming more and more interconnected (Compass, 2015). Startups are being developed with a great variety of digital services and products, entering many different areas of the economy and of the society. Startups are reshaping entire industries. Moreover, they are those who are changing the definition of "firm" (The Economist, 2014). Nowadays the *emergent Information Era companies are replacing the Industrial Era ones* (Compass, 2015).

Surrounded by a worldwide high-tech economy, the digital industry is developing *a knowledge-based society* (Humbert, 2007). Accordingly, the venture capitalist in Silicon Valley, Marc Andreessen, affirms: "Software is eating the world" (Andreessen, 2011).

Startups are going through a phenomenon similar to the "Cambrian explosion", during which the planet's life forms were multiplying (The Economist, 2014). The *growth trend of tech and non-tech startups will continue overtime*, as all necessary tools and infrastructure, together with Internet users and billions of smartphones, are in place to make technology transform every aspect of the society. Technology entrepreneurship will probably become the most relevant growth engine of the new Information Era (Compass, 2015).

Especially at the beginning of the startup explosion, San Francisco Bay, better known as *Silicon Valley*, had the most impressive evidence of startup rise, both in number and in economic relevance. In 2013, between 25 and 40 startups were valued more than \$1 billion, for example Airbnb, Pinterest, Survey Monkey and Spotify (Hardy, 2013). Nowadays, the nine most influential high-tech startups (Apple, Amazon, Google, Salesforce, VMware, Facebook, Twitter, Groupon and Zynga) have created more than \$1 trillion, out of \$15 trillions of the US entire GDP (Compass, 2015).

The recent boom in startup ecosystem's growth should be considered as a sign of long-term exponential wealth creation over the comings decades, in the context of the larger socioeconomic shift (Compass, 2015).

The change from the Industrial Era, characterized by traditional labor-intensive industries, to the Information Era, based on an information computerization-driven economy (Castells, 1999), requires a difficult adaptation process to be set into place. However, this can result in *prosperity* if the society is able to adopt new and appropriate skills, beliefs and values (Compass, 2015). *The Industrial Age or Era* began around 1760s in Great Britain, in Western Europe and United States, and continued throughout the nineteenth century. This period was characterized by dramatic changes in the economic and social organization, such as the rise of nation state and capitalism, the concentration of people in cities and the introduction of new working settings. Power-driven machines replaced hand tools, large settlements of industries started rising, mass

production organized around the concept of time was introduced, in order to generate the highest profit possible ⁷(Castells, 1999).

The Information Age or Era is a period started in 1970s, characterized by an increasing demand for communication applications and information. During this period a large amount of information is collected, managed and provided to people in a quick, wide and easy way, mainly through Internet-based and computer-based technology. Since the beginning of this period, the Information Technologies have been spreading widely, leading to changes in many economic social thanks innovation in micro-electronics, computers and sectors to and telecommunications⁸(Castells, 1999). The rise of ICT represents the driver for the development of the digital economy (or Internet economy), based on the creation of support infrastructures (e.g. Software, networks, etc.), businesses and commercial tools using digital computing technologies.

Nowadays, many experts consider Information Age slowly going to an end, being replaced by the *Experience Age*, which is dominated by micro-computers, mobile sensors and high-speed connections (Wadhera, 2016).

1.3.2 The decline of the Blue Chip

During the Industrial Era, mainly big businesses were developed, resulting from a consolidation process towards profitability. Many of these large corporations are nowadays referred to *Blue Chips*, which are companies *with underlying strength of earnings or financial stability* (Opdyke, 2010), having a strong reputation for quality, reliability and profitability in whatever market condition, mainly grown during the Twentieth Century⁹¹⁰. The *Dow Jones Industrial Average* (*DJIA*) is the price-weighted average of the 30 most valuable stocks on the New York Stock Exchange and NASDAQ, representing the U.S. Blue Chip stocks. Since the creation of the Index in 1986, its components have been modified 51 times, in order to be representative of the most valuable stocks in a medium-term horizon, signaling the changes in industry trends. Nowadays, Blue Chip stocks are provided by the shares of companies such as McDonald's, Coca Cola, Wal-Mart and Procter & Gamble, which are able to be profitable, both during economic downturns and prosperity (Nasdaq, 2016). In the *Italian Stock Exchange*, Blue Chip represents a focused market where only stocks of companies with a capital value higher than €1 billion are listed, such as Enel, Intesa San Paolo and Telecom. According to Il Sole 24 Ore, even if following a positive

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⁷ Merriam-Webster dictionary/Industrial Age. http://www.merriam-webster.com/dictionary/IndustrialAge

⁸ Merriam-Webster dictionary/Information Age: http://www.merriam-webster.com/dictionary/InformationAge

⁹ Blue Chip List: www.bluechiplist.com/what-are-blue-chips

¹⁰ Nasdaq, Glossary: http://www.nasdaq.com/investing/glossary/b/blue-chip-company

growth (+5,99% in 2015), these stocks are underperforming with respect to most Italian Small and Medium enterprises listed in the STAR Stock Exchange, recording a +25,26% growth in 2015 (Carlini, 2015).

However, the transition to the Information Age has affected many aspects of the business environment. In fact, two clear trends have been affecting Industrial corporations, despite the doubling of labor productivity: the decrease in large company performance, matched with ROA performance gap increase; the reduction by 80% of the average life-time of a company on the S&P 500 index (Compass, 2015). The main reasons behind the decrease in Industrial corporations' performance can be identified in: greater competition, due to reduced barriers to entry and liberalizations in many sectors; increased information transparency, thanks to real-time availability of pricing information; reduced consumption because of the new focus on engaging experiences and lasting relationships as source of consumer's fulfillment (Compass, 2015). In order to increase profitability, Blue Chips tend to adopt two approaches, which are typical of the Industrial Era: one is cost-cutting, while the other is enhancement of marketing activities towards revenue increase. However, these strategies can easily reach the point of lower returns. The solution to the decreasing performance trend is provided by technology startups, which target disruptive innovation by creating new products and services, reflecting Information Era's elements (Compass, 2015).

1.3.3 The rise of the startups

According to the Global Startup Ecosystem Ranking 2015, nowadays tech entrepreneurs have tools, resources and market conditions to lead a business to become an '*Unicorn*', a company with more than \$1 billion valuation (Startup Europe Partnership, 2015).

The business type better able to adapt to the Information Era business environment is represented by startups, mostly tech ones. New ventures are one of the factors with the highest *influence on economic development* because of their innovation and creative destruction, which will be deeply explained in the following paragraphs. High-growth technological companies have entered most of all areas of the society and have been replacing low performing Industrial Era companies. Examples of the described phenomenon are provided by hotel chains being replaced by Airbnb, revolutionizing the travel industry; social media, such as Facebook and Twitter, upgrading the traditional newspapers; Apple and Spotify replacing the traditional retail music chains (Compass, 2015).

The startup concept is often associated to companies operating in the digital economy. However there are also other industries in which startups are increasing both in number and importance, for example medical technology, health care, food and automotive industry.

To understand the major operating fields experiencing the rise of startups, the Italian ecosystem is quite illustrative. 72% of Italian innovative startups are mainly offering a *service-related* value proposition, focused on: *software development and ITC consultancy* (30%), *R&D activities* (15,1%) and *ICT* (8,1%).

Other sectors are industry-related (18,1%), mainly *computer and electronic hardware production*, and *commerce* (4,2%) (Camera di Commercio d'Italia, 2016). Startups tend to concentrate on the Web or software industry, rather than biotech or hardware sectors, because of the lower level of entry investment required. In fact, in 2012, startup's industries were very similar: web and ICT were absorbing 71% of startups. The remaining 30% of startups was focused on consumer product (4,8%), electronics & machinery (3,6%), clean technologies (1,2%), biotech/life sciences (0,6%) and services (19%) (Mind The Bridge, 2012).

Investments in startups reflect the industry sector trend of startups. According to Mattermark, a company tracking startups for investors, investments in high-growth innovative business in 2015 have reported an increasing trend in the *biotechnology, healthcare, social networking and finance sector*; while investment reduction occurred in analytics, software development and marketing industry¹¹.

Many influencers in the startup ecosystem consider this *phenomenon as a bubble*. Keith Rabois, a partner at Kohsla Ventures, declares that startup investments are decreasing and their valuations are dramatically falling (Mims, 2016). This current trend is confirmed by the Venture Capital Activity of financing early-stage and emerging firms with high growth potential decline, both in the deal volume and in the deal value. This slowdown can be explained by the investors' more measured and smart investment approach, by Asian investment activities falling dramatically because of the startup bubble bursting and by the overall economic slowdown and uncertainty (KPMG, 2016). The tech-startup bubble will not probably burst, even though venture capitalists realized that not all of 160 Unicorns actually value more than \$1 billion, mainly because of disalignment between valuations and business metrics. In fact, nowadays investors are scrutinizing more carefully the business plans and metrics, provided by startups, when taking their investment decisions, not focusing anymore on simply anticipating highgrowth trends (Carson, 2016).

Startups are a *spreading worldwide phenomenon*, occurring in *different ways and at different paces* in every country. According to the networking site Angel List, nowadays there are 1.043.236 startups in the world¹², following an *increasing trend in startup creation at global level*. However, it is extremely difficult to find worldwide comparable figures, as many countries do not have data collection systems yet or figures are not compiled. In addition, entrepreneurial explosion is currently occurring in different forms and dimensions over the world; by consequence, quantification of the trend is extremely complex. In fact, in the *U.S there is a slowdown*, opposed to an *increasing dynamism in Europe*.

Silicon Valley is the original location where a startup ecosystem was first being built (The Economist, 2014). North America together with Europe welcome the more influential startup areas, being the location of 16 out of 20 of the top world ecosystems (Compass, 2015). Reason by which these two areas have a more advanced startup reporting system.

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¹¹ Mattermark website: https://mattermark.com/blog/

¹² Angel List: https://angel.co/earth

Together with the slowdown in venture capital investments, the OECD database highlights the *decrease* in the share of startups over 2001-2011 period, leading to a decline in business dynamism (Criscuolo, Gal, & Menon, 2014).

A broad view of the startup activity health in the United States is provided by the *Kauffman Index*, one of the best and highly reputable indicators of new business creation. It observes three dimensions: the rate of new entrepreneurs in the economy; the "opportunity" share of new entrepreneurs as opposed to the "necessity" share; and the density share. The definition of startup in order to calculate the Index enhances the business age, which must be less than one-year old, and the presence of at least one employee besides the owner (Morelix, Fairlie, Russell, & Reedy, 2015). From 2003 to 2010 the Index reported a general growth trend in the startups activity. Starting from 2010 the U.S has reported a slowdown of business dynamism, affected by the business churning and the persistently declining new firm formations. This negative trend has been affecting all American states and a broad range of economic sectors, also the high-tech one (Hathaway & Litan, 2014). However, according to the Kauffman Index, the United States' startup activity has risen back in 2015, leading to a light reverse, even if below historical data, in the five-year declining trend. Last year, the five American states with the strongest activity were Montana, Wyoming, North Dakota, Colorado and Vermont, where the increasing trend in startup formation is linked to these countries' high real GDP growth rate (Morelix, et al., 2015). Dane Strangler, Vice-President of Kauffman Foundation, judges the end of the negative trend in a broader context. The increase in entrepreneurial activity is in line with the growth of other economic indicators and instills hope. However, in the US context, it is important to consider it as a short-term trend in a broader long-term decline period, affecting job creation, innovation and economic growth (Kauffman Foundation, 2015).

Analyzing more in depth the 2015 Index elements results, the *Rate of New Entrepreneurs* varies across states, on a monthly range between 170 new ventures in Minnesota and Wisconsin, and 540 new entrepreneurs every 100 000 people in Montana. The *percentage of entrepreneurs driven by 'opportunity entrepreneurship'* varies on a range from 69% in Alabama to 90,3% in Idaho, meaning that in the latter state less than one out of ten new entrepreneurs were previously unemployed. Startup Density component of the Index measures *the number of startups per 100'000 people*, varying immensely across states, from 81,4 startups in West Virginia, to 177,7 in the state of New York, up to 244,7 in North Dakota. It is important to highlight that only nineteen out of the fifty U.S. states exceeded the average density. Numbers from American national trends show the slight increase in startup activity with respect to 2014 for thirty-two states, while the other sixteen states have confirmed the decreasing trend of the previous years (Morelix, et al. 2015).

While the United States have shown a generally decreasing trend in startup's formation since 2010, *Europe* has a *vibrant and fast-growing startup scene*, more recent than the American one (Kollmann, Stockmann, Linstaedt, & Kensbock, 2015). Startup Hubs Europe has identified 636.964 companies in

2016, showing an increasing trend¹³. The European Union is putting into place various economic and legal actions in order to develop and support the European ecosystem (Kollmann, Stockmann, Linstaedt, & Kensbock, 2015). An example is given by the development of the *European Startup Monitor (ESM)*, initiated by the German Startup Association, to create a transparency systems for the European Startup ecosystem and highlight the growing influence of new business ventures in the European economy (Schreirer, 2016). According to the statistics prepared by ESM, 2.365 startups from 28 European countries have been identified in 2015. It must be noted that ESM relates *startups* to those *business entities younger than 10 years, featuring highly innovative technologies or business models and having or striving for a strong growth in employee or sales* (Kollmann, et al. 2015).

Analyzing the *Italian context*, during the first quarter of 2016, the number of innovative Italian startups in line with the law decree 179/2012, has reached 5.439, *increasing* by 296 units (+5,8%) with respect to December 2015 (Camera di Commercio Italia, 2016). At the end of 2015, registered startups increased by +9,3% with respect to the previous quarter, up to. 5.143 (Camera di Commercio d'Italia, 2015).

Figures show the geographical variety and the extension of the global startup explosion of the last two decades, led by high-growth technology companies, which have been entering almost all areas of the society (Compass, 2015). A wide range of reasons can explain the "Cambrian explosion" of startups. First of all, product development costs falling by ten times over the last ten years have enabled quicker and easier business and operational processes. Moreover, investors have the possibility to invest lower amounts but into a larger range of startups, leading to the naissance of new types of venture capitalists, such as business angels, accelerators and micro-VC (Compass, 2015). While users have shown a faster adoption of and reactiveness to the new technology, businesses have been taking advantage also of an easier global access to users and customers (Compass, 2015). The overall increasing trend in the number of worldwide startups have been favored also by the more accessible and uniform range of information on how to do a startup and of global standards leading to startup's success (The Economist, 2014). Following the example of The Lean Startup movement generated by Eric Ries, in order to structure the startup phenomenon, entrepreneurship has started developing its own management science, characterized by principles and practices which better fit the uncertain and rapidly evolving environment compared with principles of general management (Compass, 2015). Startups represent also a reaction to the economic and social shift the advanced societies have been going through in the last decades. Many Millennials born since the early 1980s have grown with the prolonged and difficult economic crisis began in 2008 and consider startup as a way of inventing their own job (The Economist, 2014).

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¹³ Startup Hubs Europe: http://www.startuphubs.eu/

1.3.4 The role of startup ecosystems

Most of the current high growth startups, mainly tech-oriented, have emerged from a few startup ecosystems, such as Silicon Valley and Boston area. However, the explosion of high growth and innovative entrepreneurial ventures of the last decade, which are representing the primary growth engine of the new Information Economy, has been accompanied by the rise of new startup ecosystems around the world, thus impacting on the future of the global economy (Startup Genome, 2012). In dynamic ecosystems, new business ventures have greater possibilities to grow and create new jobs (Mason & Brown, 2014). More than 20 years ago James Moore started referring to "ecosystem" when dealing with economic cluster, as business ventures' evolution is driven by the relational interaction with suppliers, customers and financiers (Mason & Brown, 2014). Nowadays experts and scholars' focus is increasingly on the "system", considering markets, policy and culture domains as characterizing elements of an entrepreneurial ecosystem (The Economist, 2014). A startup ecosystem is a segment of the broader entrepreneurial ecosystem. The most analyzed connections of the community's entrepreneurial support network are those between entrepreneurs, between formal support organizations, between entrepreneurs and key support entities and with other organizations (Motoyama & Watkins, 2014). Ecosystems are made by people, by other businesses at different stages of their lifecycle and by various types of organizations, which interact in physical and/or virtual locations, in order to create new startups. Corporations, entrepreneurs, startups' team members, universities, funding organizations, accelerators, incubators, investors, mentors and advisors, research and service-provider organizations are the actors which tend to focus on developing a specific stage of the ecosystem and of each startup. All these actors are connected by shared events, locations, activities and interactions, favoring the spread of new ideas (Startup Commons, 2016). The OECD provides a definition of entrepreneurial ecosystem, which summarizes the main results of previous academic studies. They refer it as a set of interconnected potential and existing entrepreneurs, entrepreneurial organizations (e.g. firms, venture capitalists, business angels and banks), institutions (e.g. Universities, public sector agencies, financial organizations) and entrepreneurial processes (e.g. business birth rate, number of startups, levels of entrepreneurial ambition, business failure rate, etc.), which connect and manage performance within the specific entrepreneurial environment, both formally and informally (Mason & Brown, 2014).

Even if the original startup and entrepreneurial ecosystem is Silicon Valley, nowadays many new environments are being developed (The Economist, 2014). The rise of new startup and entrepreneurial ecosystems, other than the traditional Silicon Valley, emerges from the comparison between the Global Startup Ecosystem Ranking issued in 2012 and three years later publication, highlighting the top 20 ecosystems in the world, as shown in the figures below (Startup Genome, 2012; Compass, 2015). The *first version* of the Startup Ecosystem Index was based on the weighted average of *eight different components*, such as the total entrepreneurial activity in the country (Startup Output Index); the activity level and the comprehension of the risk capital (Funding Index); actual and potential performance of startups in an ecosystem considering revenue, job growth and potential growth (Company Performance Index); the entrepreneur's mindset as visionary, resilient, risk-taker, hard worker and able to overcome

typical challenges (Mindset Index); ecosystem's speed in adopting new technologies, management processes and business models (Trendsetter Index). The future success of a startup ecosystem could be highly predicted by the trendsetter index.

The 2015 revised Index has modified the classification criteria for startup ecosystems, which is now based on five main dimensions: a) performance on the funding and the exit valuations; b) funding amounts and time on Venture Capitalists investments; c) quality availability and cost of technical talents; d) market reach on the local GDP and internationalization easiness; e) startup experience. As it can be seen from the Figure below (Figure 1.1), the most relevant startup ecosystems are in North America and Europe. Only four out of the top 20 ecosystems are located in Latin America (São Paulo) and Asia-Pacific area (Sidney, Singapore and Bangalore). As it is clearly shown by Figure 1.1, aside from Silicon Valley predominance, New York, Austin, Bangalore, Singapore, Berlin and Chicago are the ecosystems, which have improved their Index rating positioning the most, reflecting the strong growth achieved in the period 2012-2015, becoming among the most influential global startup ecosystems (Compass, 2015). However, it is important to notice the non-inclusion in the Index of Chinese, Taiwanese, Japanese and South Korean startup ecosystems, due to language barriers leading to the inability to collect reliable data (Compass, 2015).

The *Growth Index* provided in Figure 1.1 is an additional element to the Ecosystem ranking. It is an average of the growth of three variables: a) number of startups, b) previous VC investments and c) exit value. Berlin and Bangalore emerge as the ecosystems with the strongest growth potential (Compass, 2015), confirmed by discussions during the European Accelerator Summit in 2016.

Figure 1.1: Global Startup Ecosystem Ranking 2015

	Ranking	g	Performance	Funding	Market Reach	Talent	Startup Exp.	Growth Index
Silicon Valley	1	←	1	1	4	1	1	2.1
New York City	2	A 3	2	2	1	9	4	1.8
Los Angeles	3	4	4	4	2	10	5	1.8
Boston	4	^ 2	3	3	7	12	7	2.7
Tel Aviv	5	▼ 3	6	5	13	3	6	2.9
London	6	^ 1	5	10	3	7	13	3.3
Chicago	7	A 3	8	12	5	11	14	2.8
Seattle	8	* 4	12	11	12	4	3	2.1
Berlin	9	^ 6	7	8	19	8	8	10
Singapore	10	^ 7	11	9	9	20	9	1.9
Paris	11	4	13	13	6	16	15	1.3
Sao Paulo	12	^ 1	9	7	11	19	19	3.5
Moscow	13	^ 1	17	15	8	2	20	1.0
Austin	14	NEW	16	14	18	5	2	1.9
Bangalore	15	^ 4	10	6	20	17	12	4.9
Sydney	16	4	20	16	17	6	10	1.1
Toronto	17	▼ 9	14	18	14	15	18	1.3
Vancouver	18	▼ 9	18	19	15	14	11	1.2
Amsterdam	19	NEW	15	20	10	18	16	3.0
Montreal	20	NEW	19	17	16	13	17	1.5

Source: Compass (formerly Startup Genome), 2015

In general terms, it is important to highlight the trend in *Exit growth rates and Capital Growth rate*. Silicon Valley is still the leader in the startup's overall exit value, currently being valued as much as every other ecosystem combined. However, the global ecosystem landscape is growing quickly to maturity, signaled by the increasing exit value obtained by non-Silicon Valley ecosystems (+14% in the past two years). Exit values are growing at a faster pace in the European ecosystems rather than in the US ones. On the other hand, the total VC investment among all the most important startup areas rose by 95% since 2012, even if the total amount of Venture Capital investments has decreased in the last year. Bangalore, Boston, Amsterdam and Seattle have been registering the strongest growth in these dimensions, while San Francisco has almost doubled (Compass, 2015; KPMG, 2016).

Even though global startup ecosystems are exploding, *Silicon Valley* is currently the leading ecosystem for high growth, innovative and tech startups, mainly on performance, funding and talent dimensions. The San Francisco Bay area has a worldwide reputation of being the Tech Mecca. It has attracted between 14.000 and 19.000 startups and up to 2.2 million of high-tech workers since its rise. In fact, Silicon Valley has the highest startup density among all world's areas. Overtime it has been capturing approximately 45% of the top Venture Capitalists investments; startups located in this have been achieving exit values more than 5 times higher than New York or London eco-systems. Silicon Valley has the highest value in *Startup Experience dimension ranking*, an indicator of lessons learned and of

the innovation process developed during time by the Californian ecosystem, resumed into the new management science for entrepreneurs of the Lean Startup (Compass, 2015).

The second-best world's startup ecosystem is *New York*. Not considering the reduced availability of well-priced and technical talent, its leaderships is mainly due to the location popularity for non-US startups, considering the area as the best one to set a sales offices for an effective US market entry.

Austin and Texas area can be considered among the most promising emergent ecosystems, thanks to the easy accessibility to and low cost of high quality talents, to the entrepreneurial culture and to the reputation of second office location for startups in Silicon Valley.

Berlin is the most promising European ecosystem, leaping from 15th to 9th position. The local culture and enthusiasm are a main driver to future startup progress.

The most unexpected rise in the ranking has been performed by *Bangalore*. The Indian ecosystem has a young and flourishing startup ecosystem, currently developing an innovative culture, which is a prerequisite for the creation of new tech-startups, in order to achieve greater importance in the future (The Economist, 2014; Compass, 2015).

The comprehension of startup ecosystem's trends and their development encouragement is essential to sustain the future startup's growth and to increase success rates. As it has emerged during the European Accelerator Summit 2016, hosted in the Italian business accelerator H-FARM, entrepreneurs, investors, accelerators and policy makers must *ease the flourishing of entrepreneurial ecosystems and co-operate to build a great global network*, in order to encourage startup growth and success.

1.3.5 The relevance of startups

Innovative and high-growth startup companies are relevant in *spreading an innovation-oriented*, entrepreneurial culture, in attracting talents and capital from abroad, in creating qualified employment particularly for young people and in *promoting social mobility and merit* (Italian Ministry of Economic Development, 2016). Moreover, startups represent *productivity growth drivers, new job creators, innovation increasers and business internationalization promoters* (Mason & Brown, 2014). The main reasons encouraging the startup ecosystem's growth can be grouped in three main fields:

i) Economic and job growth

Startups are extremely relevant in the economic context of the Information Age. In the long term, startup companies *create a large portion of new jobs* and *contribute to the country's economic growth*. Thanks to the potentially revolutionary technology developed, startups are growth engines for the economy and *new industry creators* over time. They are becoming wealth generators for owners, employees and shareholders (Compass, 2015).

Business dynamism is a vital process to increase productivity and to achieve sustained economic growth; it is inherently disruptive process. It represents the manner by which firms are continually formed, fail, develop, while creating, destroying or turning over jobs. This results in the central role of entrepreneurs and business dynamism in long-term job creation and economic growth (Hathaway & Litan, 2014).

Startups are the *most dynamic economic organizations on the market*, bringing dynamism and competitiveness to the economic system and maintaining it healthy and vital (Jaklic & Rebernik, 2014). There are two measures to account for, in order to evaluate business dynamism: *firm entry* and *allocation of resources*. (Hathaway & Litan, 2014).

One of the main components to be analyzed of the startup phenomenon is the *mortality trend*. Entrepreneurs, investors, policy makers, and all actors present in the startup ecosystem may be interested in understanding how to reduce the failure rate. High growth technology startups have a 75% failure probability within the first two years of the business lifecycle (Blank, 2013; Compass, 2015). There is a common *rule of thumb* on failure rates: only three or four startups out of ten fail completely; three or four startups are able to return the initial investment; one or two can be considered successful and profitable (Gage, 2012). Shikhar Ghosh conducted a research in 2012, from which resulted that three out of four venture-backed startups fail. However, he estimated different failure rates according to the definition: 30%-40% of startups liquidate all the assets and more than 95% of startups fail in terms of forecasted Return On Investment (Gage, 2012).

According to the Italian Ministery of Economic Development, the Italian startup ecosystem has grown in 2014, enabling a net positive results of 1.643 new startups, with an increase of registered startups of 111,2% (Camera di Commercio d'Italia, 2015).

Fast-growing startups and young firms contribute to job creation, as part of a process of reallocation of productive resources across firms, taking over the market share of existing firms (Hathaway & Litan, 2014; Colombelli, Kraftt & Vivarelli, 2016). However, being a newborn firm is not sufficient to be a growth and job creation driver. It is important to be an *innovative* startup, rather than a simple startup, providing processes innovation rather than product innovation, to transform and lead economic industries and contribute to job creation (Colombelli, Krafft, & Vivarelli, 2016). The contribution of startups to economic growth and job creation explains the reason why their explosion represents a driver for long-term wealth creation.

More specifically, according to a study by the Kauffman Foundation, new business ventures represent one of the most appropriate *metrics for determining economic growth*. In sum, companies habitually create and destroy jobs in reaction to market cycles. In the USA, existing firms tend to be net job destroyers, losing 1 million jobs per year, while startups create an annual average of 3 million new jobs (Kane, 2010).

It must noted that startup firms have an advantage by definition as they cannot lose jobs; however some of the jobs created are lost within a year because of the startup failure (Kane, 2010).

According to OECD, young small-medium enterprises represent the main source of job creation, over the past decade and across the 18 OECD countries. New business ventures individually have a small weight in the economy, representing only 17% of total jobs. However, startups contribute for the 42% of job creations and only to 22% of job destruction (Criscuolo, Gal, & Menon, 2014) According to the ESM, at individual level European startups tend to create on average 12,9 jobs each within 2.5 years, including the founder. The comparison among European countries ecosystems evidence *large*

differences in job creation. In Germany, UK and France, startups tend to create on average more than ten job, opposed to countries such as Romania where the focus is on the livelihood of the founder with no additional jobs created (Kollmann, Stockmann, Linstaedt, & Kensbock, 2015).

The *most successful startups*, such as Google, Facebook and Amazon, are driving a large share of the global economy. However, in the next decade the *world GDP* will probably be driven by companies that will be launched from startups ecosystems such as Bangalore, Singapore or Sao Paulo (Compass, 2015). Moreover, new business ventures *increase competition in the markets and drive innovation*.

In the coming years, the combined positive impact of startups on economic and job growth will lead the ecosystems with the more flourishing startups to experience high growth in wealth (Compass, 2015).

ii) Proactivity values in the society

In the Information Era people and businesses must be able to reinvent themselves, by *objectively studying data*, by *evaluating implications in a rational way* and by *incorporating recommendations* in order to maximize the society's growth and wealth. Transitions between Eras tend to change society aspects, such as government, business, finance, education, technology, etc. It is about *cultural changes* (Compass, 2015). The transition between Industrial and Information Era is resulting in a complex transformation process for the society, where power is changing too. The old idea of a leader-driven power, being accessible to a selected, closed range of people and based on the competitive advantage of control is being substituted by a new form of power. The latter is *held by a wide, open range of people, based on peer interaction and active participation*. The so-called *New Power* is related to the rise of sharing, shaping, funding, producing and co-owning behaviors. People expect to be *actively involved*, as a right (Heimans & Timms, 2014). In order to achieve a successful transition, both Old and New power structures must merge and adapt, learning from each other (Compass, 2015).

iii) Innovation

According to Sandi

According to Sandile Shabangu, founder of Startup Mzansi Foundation¹⁴, innovation represents one of the driving forces of the economy in a knowledge-based society (Shabangu, 2014).

Innovation is the process starting from a new idea and ending with the market introduction, and it is not the synonymous of "invention". According to Schumpeter, it is about "doing things differently", such as the technological change in the production process already in use, the opening of new markets or of new sources of supply, the new work organization, the improved material handling or the setting up new business ventures with differentiating features (Schumpeter, 1939). Schumpeter refers to "creative destruction", to describe the entrepreneur's introduction of radical innovation into the economic system as the driver for long-term growth. However, this process destroys the economic value created by existing companies, which have previously positioned in the market. Innovation sets up an evolutionary process in a capitalist environment, as entrepreneurial businesses create higher economic value for their

¹⁴ Startup Mzansi Foundation: the South African non-profit organisation supporting young entrepreneurship

radical innovation, compared to the value destroyed by replacement of ways of doing things set by previously established firms (Schumpeter, 1942). The concept of "creative destruction" is partially integrated by the one of "disruptive innovation", developed by Christensen. The process by which a small business venture with limited resources is able to challenge previously established firms in the market is referred to as "disruption". The reason why this occurs is given by new entrants in the market successfully targeting customer segments which are ignored by the incumbents, as less profitable and less demanding (Christensen, Raynor, & McDonald, 2015). Innovation can be accomplished by large corporations, following the corporate model, or by startups, applying the entrepreneurship model. However, the strongest vehicle for disruptive innovation is represented by new business ventures, as they are able to fulfill the two underlying requirements for innovation: a) mobile resources and b) aligned incentives between capital providers and innovators. Startups play a critical role in inducing innovation, in supporting the development of new sectors and new market references, other than in enhancing competition (Colombelli, Krafft, & Vivarelli, 2016). Startups have a temporary advantage on larger, but slower, corporations in developing and marketing innovation (Engel & Freeman, 2007), as the new entrepreneurial projects are characterized by a strong focus on innovation and solid ambitions for growth (Mind The Bridge, 2012).

Large corporations are characterized by legitimacy, capital, brand reputation, specialized workforce, but also immobility and misalignment of interests, leading to a slow innovation process (Engel & Freeman, 2007). This represents the reason behind the increasing trend of open innovation processes, during which corporations work together with or acquire startups in order to develop and retain new ideas, technologies and competencies (Di Lucchio, 2016).

In order to implement public policies, institutions have identified *rational criteria* to be met when defining innovative startup. The Italian Ministry of Economic Development has identified these in: a) R&D and innovation expenses are at least 15% of the turnover or of the production value; b) employment of highly skilled personnel (PhD holders or Master graduates); c) owner, depositary or licensee of a registered patent or software. (Dl. 18th October 2012, n.179).

Innovation and startups, which are the vehicles for it, are relevant drivers for economic and social growth and prosperity (Compass, 2015).

1.4 The startup lifecycle: reasons for failure and success drivers in startups

1.4.1 Literature focus on startups

The rise of startups has enhanced the interest of scholars and institutions in studying startups and the related managerial, organizational and entrepreneurial domains. Because of the low consideration of startups as main focus of management studies, the current academic literature on the topic implicitly refers to these particular new business ventures. However, even if a standard framework describing startup characteristics, processes and challenges is not possible, because of the high uncertainty and

variability characterizing it, actors of the startup ecosystem consider necessary a deeper understanding of the repeating patterns leading to success or failure. An example of such interest is provided by the increasing rise of initiatives and projects to understand specific startup-related dynamics, such as geographical mobility studied by European Startup Initiative ¹⁵. to The transformation of startup-related entrepreneurship into a science can lead to an increase of the success rate of startups and of the worldwide pace of innovation.

Startup studies mainly analyze management, organization and entrepreneurship-related issues individually. The first approaching the highlighted domains as a single element were Van de Ven, Hudson and Schroeder (1984), who made entrepreneurial, organizational and ecological considerations on the process of designing new business startups. According to them, the organizational framework adopted to plan an organization and the implementation process during its the development phase impacts on the future stages of the business venture. Among the organizational theories, the ones specifically tailored to startups and emergent organizations have focused on the process of new venture creation and the properties to be possessed when moving from the pre-organization to the new organization (Gartner, 1985; Gartner & Katz, 1988). However, theories have not yet focused on the startup evolution.

By focusing on the management domain, theories aim mainly at better understanding entities formed by individuals or teams that tend to coordinate their efforts towards a common goal, in order to increase the success rate. An increasing number of scholars and theorists in the management field are becoming increasingly interested in studying startups and their dynamics. Management theories are applied in startup research in the area of strategic management, small business governance, human resource management, team management, funding and others. It must be noted that most of the studies use startups as a business case or as a sample, rather than tailoring research specifically on startups (Salamzadeh & Kawamorita Kesim, 2015).

Entrepreneurship theories focus on the characteristics of the founders and the leader(s) of the business, dealing with ideas, creativity and innovation. However, startup-tailored studies in these domains should be conducted, as these theories have the most relevant role in the early stages of an organization.

1.4.2 The startup lifecycle: from foundation to growth or failure

As previously explained, newly created organizations do not automatically qualify as startups. In fact, the company must target a scalable business model characterized by fast and high growth through innovation. In the past, the idea for a new product was the main driver for startup creation. Nowadays, the *business formation* process starts when a person or a team of individuals with complementary skills believe to have an innovative business model. This is the driver for a startup development. Founders

¹⁵ Startup Heat Map by European Startup Initiative: http://www.startupheatmap.eu/

may be working on different ideas of products, before identifying the successful one (The Economist, 2014).

A *complete startup strategy* is the result of a process of interaction and performance of three basic elements: a) the entrepreneurial idea; b) the founder and the team; c) the business model.

The former is the basis of every business experience, as it represent a motivational driver for resource and time investment. The premises of an *entrepreneurial idea* are: innovation, motivation and feasibility. *Founders and teams* are one of the most important elements to focus on when creating a new business venture, representing the main strategic resource in the first phases of the startup. The *business model* is the translation of the entrepreneurial idea of the founder (or of co-founders) in a concrete business project, which defines the vision and the mission, goals and objectives, steps and timing of the strategic implementation of the business idea (Gualandri & Venturelli, 2011).

According to Paul Graham, the *business idea* is about offering people better technology to their current status. The three required elements for a successful startup are: a) *good people*; b) a *product or service required by a market*; c) *low money spending* (Graham, 2005).

Many entrepreneurial projects find *difficulties in acquiring funds to finance* the development of the idea, from the business plan financing to the team creation, and the potential business set up activities, from prototype development, to production and sales. The initial capital invested by the business founders usually is not enough to finance all the necessary activities. During the first phase of the life cyle of a startup the *failure risk* reaches high levels, due to the uncertain idea potential and its technological and market conditions. In the following stages, the risk drops. However, it is important to understand how the startup can reduce the risk of failing to cope with the *Death Valley*, the period of time from when a startup receives enough funding to when it is able to generate revenues, reaching financial sustainability. Understanding the current stage of the startup in its life cycle enables entrepreneurs and experts to better assess the business progress and increase the success rate.

The Startup Owner's Manual (Blank & Dorf, 2012) provides a customer-focused life cycle model based on four steps, highlighting the activities an early-stage company must implement. The first two steps include activities performed for developing, testing and validating the business model, while the following ones are related to the execution of the business model. The *four stages of the Customer Development model* are:

- i) Customer Discovery: the founders' vision is translated into possible business models, which
 must be tested by observing customer reactions to the underlying assumptions.
- *Customer Validation*: the repeatibility and scalability of the business model is tested. The marketing and sales roadmap is developed, in order to validate the ability to create a large enough customer base.

- *Customer Creation*: the business model execution is set up and the customer base is built starting from the startup's first sales. Strong financing is required to develop the market demand and drive it through marketing activities. Each startup has different customer creation strategies, depending on whether the target market is new or exsisting.
- iv) Company Building: the organization transits from the startup-status, searching for a scalable and business model, to structure as a company, focusing on execution of a validated business model and the implementation of structured and standardized processes.

The previous framework can be translated in more concrete terms. Among the actors of the startup ecosystems, the *lifecycle of a startup* goes through different phases, known as: (Rega, 2015; Kollmann, Stockmann, Linstaedt, & Kensbock, 2015)¹⁶:

- i) *Pre-seed*: it is the very early stage of a startup, characterized by the feasibility study of the business idea, where the concept is explored in all its dimensions. Uncertainties on the future development of the idea are at the highest level, revenues are null and financial capital is not usually necessary. During this first stage, the business model is clarified, the market is carefully analyzed and the prototype is being developed, to better research on the concept and validate the idea. The capital need is satisfied by the recourse to informal funding from personal savings and capital raised from family and friends (3 F: Family, Friends, Fools) or governments grants or loans. The startup generally enters the next stage with the drafting of the business plan, which represents a guideline for the business development;
- ii) Early stage: this phase of the life cycle in turn can be splitted in two steps:
 - a) Seed stage: the technical-economical valuation of the entrepreneurial project is performed and the startup is in a conceptualization phase. An iteractive process of product development is implemented, continuously modifying the prototype according to feedbacks received from the early adopters of the product or service. This process ends with the development of a minimum set of features enabling to use the product and test the key assumptions about the customers' interactions with it (Minimum Viable Product). This phase is characterized by absence of revenues and a high uncertainty in the success probabilities of the idea. The financial need is generally satisfied by family, friends and fools (3Fs) or by external fundings from business angels or early-stage investors.
 - b) *Start-up stage*: the business idea is submitted to the market as the startup is working in developing a marketable product. During this extremely capital-intensive phase, the business activities are set up and the first users enable the generation of a limited amount of revenues, which do not allow the business to reach financial sustainability. The financial need to sustain the go-to-market strategy derives from Seed investors or other external means.

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¹⁶ Startupzionario by IdeaStartup: https://www.ideastartup.it/startupzionario/

iii) *Early-growth stage*: this phase represent the initial business growth. A marketable product is created and the startup is able to achieve high sales growth. Revenues increase at a mid-high rate and the operating risk reduces; however, high financial need results from the development of the market channels and the sales expansion typical of this phase.

Once the startup has reached the maturity stage, it can follow two different path, which determine its success or its failure:

- iv) Sustained growth stage: the startup increases the turnover at a high growth rate, while the operating risk decreases and the business is able to generate internal financial resources thanks to the turnover increase. The startup is an established player of the market, focused on future growth plans and on loyal customer base development. Sales growth is not explosive but manageable. High external financial resources are necessary to sustain growth and maintain financial balance, which mainly are under form of venture capital, institutional equity or loans. However, the business must diversify the sources of financing in order to diversify its financial risk.
- v) Steady stage: the startup is achieving low or decreasing growth rates in terms of sales and customer value.

1.4.3 Financing startups

Business ventures require financial resources to start the business activities, to execute the strategy and to grow the entrepreneurial venture, from the entrepreneurial idea to the autonomous cash generation (Davila, Foster, & Gupta, 2003). Most startups require *external financing in order to grow* (Sudek, 2006). The strategic role of *business angels and venture capitalists* can be desumed by analysing the amounts of investments in startups. In the first three months of year 2016, these agents have invested \in 22 milion (+10%) in Italian startups and \in 2.8 billion (+1%) in Europe. In the USA investments reached \$25.5 billion, even though experiencing a decreasing trend (-25%) compared to 2015 (KPMG, 2016; Rociola, 2016).

There are different tools and parties enabling the business venture to collect capital, both internal and external. These are represented by (Gualandri & Venturelli, 2011):

- i) *Bootstrapping*: the firm finances its activities with the founders' personal savings or with cash generated from the operating revenues of the new company.
- ii) Family, Friends and Fools (3F): if the founders lack of enough private capital, the first external source of capital considered is their own private network of family and friends, emotionally tied to the entrepreneurs. Fools are skilled investors, who decide to finance the entrepreneurial idea based on a clear project, as they believe in the ability of the founder/s to develop a profitable and fast-growing firm.
- iii) Debt: the startup may be financed by both short-term and long-term capital, which requires reimbursement at a defined date. Debt provides capital through bank account overdrafts,

- factoring or other banking tools, leasing bonds and loans from founders, banks or other private investors.
- iv) Contributions from the public sector: they are made of funds from the public treasury. Many national governments, the European Union and other public institutions are implementing policies to support startup's creation and growth, providing a simplified legislation and capital contributions. The rationale behind this type of capital is noticeable: the aim is to recover startup expenses and to sustain actions for business growth.
- v) *Private Equity*: it represents a stable form of capital, as it remains invested in the business for an unlimited time without reimbursement obligation, reason why it is a risky form of capital. The investor provides the business with necessary funds with the final purpose of selling the shares and obtaining a capital gain. *Three main types of equity* can be identified:
 - a) Business Angels: they are informal investors, who have a background as managers or entrepreneurs themselves, equipped with a network of relationships, strong management skills and a good experience. They decide to invest in potentially high growth startups, despite not having tech expertise, in order to gain from a future exit. Their focus is mostly on the idea and team potential to grow rather than on the return of the investment. Angels usually invest during the first stages of the business life cycle, as they are high-risk takers and they tend to get involved in the management. Syndicate investing is typical among business angels, who enter deals among each other to co-invest in the first phases of a new business venture, sharing the high risk deriving from it.
 - b) Venture Capitalists: they are investors of Private Equity, which typically collect funds from various subjects (banks, institutions, insurance companies, pension funds) and invest these in the capital of innovative and high-growth firms, providing financial mentoring too. The amount of capital invested tends to be higher than that invested by Business Angels. This type of capital is not suitable for the pre-seed and seed stage, while it is more common during startup or early growth stage. This explains the reason why VCs considering Return On Investment (ROI) as a critical investment criteria, in addition to the evaluation of idea and management team.
 - c) Capital from the Stock Exchange Listing: the startup collects capital from the Stock Exchange market, after going public.
 - d) Accelerators: nowadays these organizations are present in almost every relevant city. The startups selected to participate to the Acceleration Program are provided with capital, mentorship, services and office spaces in exchange for 5 to 10% equity share.
 - e) Crowdfunding: it is a form of financing new business ventures by collecting small amounts of capital from a large pool of individuals, wider than the traditional network of family, friends and investors. Through Reward-based crowdfunding (eg. Kickstarter, Indegogo), hardware startups or creative projects collect capital without the transferring equity shares, as individual investors are interested in the physical return of the product. Equity

crowdfunding is the most relevant for startups, as individual investors provide capital against equity, becoming shareholders themselves. This fundraising type is managed by aggregators.

The intensity, the quality and the type of the relationship established by the business venture with the financial market depends on various elements, such as: a) the characteristics, the experience and the choices of the entrepreneur or of the founding team; b) the reference market and the industry's entry capital requirement; c) the lifecycle stage and the risk involved; d) the amount of money required. More precisely, *each stage of the business life cycle* is characterized by *different activities*, which define *different financial needs* for the firm (Gualandri & Venturelli, 2011).

Pre-seed capital tends to cover the expenses for prototype development and deep market analysis. The main sources of financing during this stage are bootstrapping, Family, Friends and Fools (3F), business angels and accelerators. Due to the high risk involved, the amount of capital raised usually is not higher than €250 thousands.

The following *Seed stage* requires capitals to start the company and find the optimal fit between the product and the market. The typical agents providing seed capital are business angels and early-stage venture capital firms. The typical capital amount raised in the seed round in Europe ranges from ϵ 250 thousands to ϵ 1 million, which is a lower amount than USA. When the startup has defined the product, it needs capital to scale and improve the distribution system and the marketing & sales activities, establishing and executing the business model. In Europe the amount raised by the firm during *Series A round* ranges from ϵ 2 million to ϵ 5 million, mainly through Venture Capital investments. The following *Series B round* enables a startup with a fully working business model and an established customer base to raise capital from ϵ 6 million to ϵ 10 million, in order to finance the scaling up of the business. Startups becoming companies enter a *Series C round* with a larger pool of investors or enters an IPO operation 17

1.4.4 Why startups fail?

The failure risk involved in the phases from Pre-Seed to Early-growth or, accordingly, in the first two stages of the Customer Development framework is extremely high. There are several underlying reasons, which are all linked to the dynamism of the implemented processes in order to test the business model assumptions. By definition, *failure is part of the steps involved* with the search of a scalable and repeatable business model, the development of a product or service and the first approaches to the market (Blank & Dorf, The Startup Owner's Manual, 2012, pag.82).

Defining the startup failure rate is extremely complex, mainly due to the *different definitions of failures*. In the USA, failure is referred to the *inability to perform an exit*, which is the sale of the company shares

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¹⁷ Startup Explore-the startup funding community: https://startupxplore.com/en/blog/types-startup-investing/

or of an entrepreneurial project. This may not be the most appropriate criteria for startup failure definition but it is the most unbiased (Battocchi, 2014). According to statistic data, in the USA 25% of startups failed after 1 year, 36% after 2 years and 44% after 3 years ¹⁸ According to the National Venture Capital Association, focusing on startups backed by Venture Capitalists investments, the failure rate in USA falls in a range between 25% to 30%. However, according to Harvard Business School senior lecturer Shikhar Ghosh, the industry failure rates underestimate the startup's failure phenomenon. When referring to failure as the liquidation of all the business assets with investors losing a large share or all the investment in the company, the rate for startups reaches 30-40%, which is in line with the common rule of thumb on the failure rate A different definition, based on the return on investment, leads to a higher failure rate, up to 70-80%. Startups unable to meet the plans of an entrepreneurial project are considered a failure with a rate of 90-95% (Gage, 2012). Gust, a funding platform connecting startups and business angels and venture capitalists, have studied the failure rate of angel-funded startups: 50% of these go out of business. The remaining share is splitted between returning the original investment (30%) and being successful and generating higher revenues (20%). These results, which are data-driven, confirm the common rule of thumb on the failure rates, which claims that of ten startups, only three or four fail completely. Additional three or four are able to return the initial investment, while one or two startups achieve success and provide investors with high returns (Rose, 2015).

Each startup is a per se case study with specific reasons of success and of failure. However, there are more common reasons leading to the failure of a startup. In broader terms, startups fail because of premature scaling, which is represented by the uneven progress in one or more dimensions among product, team, business model and financials with respect to the customer one. Too large teams, spending large amounts on customer acquisition without a complete product or scalable business model or developing a product without a target market are examples of premature scaling of startups, leading to failure (Marmer, Herrmann, Dogrultan, & Berman, 2012). A report issued by CB Insights, a venture capitalists database, highlights the most common reasons for startups failure, based on the analysis of 101 startup failures (CB insights, 2014). The results of the study confirm propositions on the topic from different sources (Nobel, 2011; Marmer, Herrmann, Dogrultan, & Berman, 2012). Discussions on the topic with influencers in the startup ecosystem have been personally held by me in H-FARM and, in addition to outcomes of the European Accelerator Summit 2016, they have all confirmed the main reasons for startup's failure presented by CB Insight's report (2014).

The most relevant reason (42% of startup failures) has been identified in developing a business idea not serving a specific market need. Startups often do not understand the target market and the customers needs. Even if good technology, strong expertise and reputation are available, not solving a market need

¹⁸ Statistic Brain Institute on Startup Failure Rate by Industry http://www.statisticbrain.com/startup-failure-byindustry

or not addressing correctly the target user results in the impossibility of implementing a scalable business model.

Another reason is given by the *lack of cash during the execution of the business model* (29%). Money and time are scarse, invaluable resources which must be allocated in a judicious way. Startups often *fail to develop a structured business and financial plan*, which outlines a clear strategy execution roadmap, the human resource need for the business implementation, investments to be done and clear product, marketing and sales plans.

Startup teams often ignore competition, by getting obsessed by it or by disregarding it. 19% of startups failed because they *lack a deep competition analysis* after having validated the business idea.

Other reasons are: the wrong or unmarketable pricing strategy, the inability to control costs, the lack of a user-friendly product; absence of a clear and scalable business model, the complete focus on product development rather than marketing activities, the non-validation of the product among the users, the wrong timing of the market release and other reasons. Roy Povarchik, an Israelian expert of startup growth, personally confirmed the absence of the right team (23%) and disharmony among co-founders (13%) as reasons for startup failure.

A balanced team with different skills is essential, as the founding team should be able to build the product itself. Startups often are lacking critical skills, such as technological or business ones. A successful team is made of smart people with various complementary skills, who are able to develop the technology and the product, analyze the industry and scale the startup; members must trust each other and have a specific responsibility role. The team represents a strongly emphasized variable by investors, when deciding to finance a business idea, and by accelerators or incubators, when selecting startups to attend their program.

Elinor Cohen, a startup consultant in community building and customer engagement, considers founders' passion for the domain on which the enterprise is focusing on as an essential element for the startup success. One of the most common reasons of failure is the *lack of passion of the founders and of knowledge of the business-specific domain*. It often occurs that startups are set up to take advantage of specific trends while the founders had no interest in the domain. Typically this approach leads to a failure of the business venture, as the founders are not passionate about the entrepreneurial activity, not being motivated to overcome challenges and difficulties.

9% of startup failures are related to *wrong location*. In fact, this should be congruent with the startup offering, in order to better validate and adapt the business model, closer to the target market. Moreover, because of the inconvenient location chosen by the startup or because of the different geographical position of team members, startups often work remotely. *Remote working (or computer-mediated teams) teams* represent a strong reason for failure, mainly because of the lack of quick and straightforward communication, of teamwork and of planning.

1.4.5 Reasons for success

According to studies on startup performance, which mainly focus on business ventures backed by VCs and Angels, an average of 25% of startups generate a positive Return On Investments and merely 1% goes public.

Many experts and scholars have attempted to define a list of success factors, which enable to reduce the failure risk of a startup. A deeper understanding of the repeating patterns of successful startups and of entrepreneurial failures could generally increase the ability to innovate and to grow of startups. A *flexible* framework defining principles, methodologies and suggestions about how to create a successful startup should be developed, even if a model suiting all startups represents an unattainable home. However, this is the increasing focus of many contributors (Marmer, Herrmann, Dogrultan, & Berman, 2012).

Bill Gross, a successful entrepreneur and one of the best American financial managers, has identified *five elements* leading to the success of a startup. These are represented by:

- o the entrepreneurial idea;
- o the team and its ability to perform a customer-focused execution;
- o the business model and a clear path for revenue generation;
- o an appropriate amount of funding;
- o the *correct timing* of the market entry and the *ability to educate the consumer* to use the product.

The observation of these in more than 100 startups has resulted in the evidence that timing accounted for 42% of difference between a successful startup and a failure. Team, execution, business model and funding followed in order (Gross, 2015). However, these elements are interconnected. Funding is necessary for the startup success, as non-timely funds may lead the organization to delay its growth and lose the competitive advantage of being one of the first movers (Davila, Foster, & Gupta, 2003). Knowing in advance which will be a successful startup is impossible; however, it could be relevant to understand what concretely are the elements considered as critical by investors, resulting from years of interactions with this type of organization (Cusumano, 2013). When *evaluating a startup*, venture capitalists tend to assess the presence of:

- vi) A *strong management team* with a balanced and broad experience, solid technical skills for product development linked to well-grounded business, marketing and sales knowledge is a valuable element. In fact, VCs investment decisions focus on the startup's management team first and on the idea then. According to many researches carried out mainly by investment firms, the key factors of the founding team are determination, imagination, naughtiness, friendship and flexibility, which are among the selection criteria to participate to Acceleration Programs (Graham, 2010a);
- vii) A *structurally attractive market*, which is able to become larger, fast growing and profitable for new entrants, should be the focus of every startup. Investors require as essential information the unique competitive advantage to overcome competitors and the actions to capitalize it by reaching the target market.

- viii) An innovative product or service, which has the potential to become a 'must-have' for the target customer, is highly valued by investors. The startup must provide them with quantitative and qualitative information on the unique value of the offering, compared to substitute products and the estimated willingness to pay of the potential user.
- ix) *Interested customers*, which are willing to pay for the product or service, increase the investors' inclination to provide capital. This can be easily proven by providing early adopters and potential users with a prototype or a functioning product with essential features.
- x) The *ability to overcome the customers' fear of the startup's failure*, which would impact negatively on technical support of the product or service or on the possibility of future upgrades, is highly valued, mainly in the short-term.
- xi) *High growth and profit potential* is one of the key elements of a successful startup. Investors are interested in *milestones* to be achieved by the business in order to grow and scale up quickly. Moreover, a strong focus must be on *cash management*, which is critical to reach profit. Investors highly *value timely execution*, as many opportunities are missed and competitive advantage is lost when too much time is required for activity implementation.
- xii) The *founders' team* must be *focused* in efficiently and effectively managing scarce resources, while being *flexible* to adapt the strategy, the business model and the technology to the continuously changing environment. Team flexibility is often measured by: a) the members' willingness to listen to entrepreneurship experts and mentors; b) by the ability to collect customer feedbacks and track metrics, adapting the offer and the strategy accordingly, in order to consider the suggestions of startup leaders as Steve Blank, Eric Ries and Paul Graham, c) by the ability act on feedbacks from industry experts (Marmer, Herrmann, Dogrultan, & Berman, 2012).
- xiii) Offering *prospects of large returns on investment* is critical for the decision of the external capital providers to finance the startup's activity. High-risk investors are generally attracted by return higher than 20%.

When assessing a startup to potentially invest in, VCs usually focus on *metrics* related to the *money* raised in the past, elements of the unfair competitive advantage and forecasted revenues. It is relevant to notice that better performing VCs are aware of the business model search process startups are going through, by consequence they focus on the team's ability to learn, rationales behind strategic and product-related decisions, team cohesion, stage of certain metrics and the customer conversion rate (Marmer, Herrmann, Dogrultan, & Berman, 2012). Angels and VCs are mainly attracted by two factors when entering a deal with a startup, as reported by many researches: the entrepreneur and the management team.

A research on new businesses' *investment criteria of venture capitalists* has highlighted as the most critical ones: a) the *entrepreneur's leadership personality* in managing a business, in sustaining strong effort and dealing with risk; b) the founder's *experience* in the target market; c) *high-growth market*; d)

a product or service with *innovative content*, not necessarily with technological content, which is protected by Intellectual Property Rights; e) high *return on investment* and easiness in making it liquid. However, it must be noted that entrepreneur's experience and personality have a stronger importance with respect to market, product and financial considerations (MacMillan, Siegel, & Narasimha, 1985). Further research has been performed in various countries such as UK and USA, focusing also on business angels, which has confirmed and enlarged the previous findings.

The investment criteria considered as the most relevant are in order:

- 1) The entrepreneur and team's enthusiasm;
- 2) The entrepreneur's commitment and passion for the business;
- 3) The management team;
- 4) The trustworthiness of the entrepreneur;
- 5) The potential exits to obtain liquidity from the investment.

Other *secondary elements* are more business-related, such as: entrepreneur's domain expertise; market growth potential; Return On Investment; market entry barriers for competitors; Intellectual Property protection of the product; Business profitability and others (Sudek, 2006).

1.5 Conclusion

Considering the economic and social relevance of startups for global wealth creation and the fundamental role of external investors such as Business Angels and Venture Capitalists in sustaining high-growth and innovative business ventures, it is important to better understand one of the most relevant investment criterion: the entrepreneurial passion and the commitment of both the founder or entrepreneur and of the team. In fact, startups whose entrepreneurs show passion are more likely to receive investors' interest. Ventures with a better business model or product whose founders lacked enthusiasm and passion are perceived by investors as being potentially less successful and not interesting (Sudek, 2006; Cardon, Sudek & Mitteness, 2009).

CHAPTER 2

TEAM ENTREPRENEURIAL PASSION

2.1 Introduction

Academics are increasingly interested on how entrepreneurial success is fostered by affective processes. In fact, affect is increasingly recognized as an influential element in the entrepreneurial process (Baron, 2008). Observations of *individual, interpersonal and organizational cognitive processes*, such as business decision-making, problem solving, evaluations or judgements, and of *organizational behaviors*, for example team cooperation, willingness to engage in citizenship behavior or workplace aggression, have confirmed the influence of affect on these processes (Baron, 2008; Drnovsek, Cardon, & Murnieks, 2009). *Entrepreneurial activity* is relevant for the translation of innovation into high-value products and services, occuring in technological and organizational terms. An effective translation requires *organizational and environmental factors* to be *integrated with personality traits*, mainly competencies, motivation, cognition and behavior, in order to point out a clear reasoning for entrepreneurial success. Venture growth is related with the entrepreneur's traits and skills, such as *passion, tenacity, new resource skill, and situational motivation*, through both direct and indirect relationships, which are represented by communicated vision, self-efficacy and goals. More specifically, passion and tenacity are found to be indirectly related to venture growth (Baron, 2008).

Entrepreneurial passion is extremely relevant in business financing. Being a strong indicator of the motivation and the ability to develop and nurture an innovation with a high value-added content for the society, entrepreneurial passion of founders represents a critical and powerful tool for an effective resource collection (Vallerand et al., 2003). In the last years, scholars have been researching the context of entrepreneurial emotion and the influence on the entrepreneurial process. The latter involves recognition of potential opportunity, assessment of the feasibility and market desirability of the new value created, and the exploitation and adaptation of the potential business opportunity. These, in turn, entail the acquisition of essential financial and human resources, the quick and effective adaptation to the continuous changes in highly dynamic and risky contexts and, finally, the entrepreneur's capacity to cope with high levels of stress (Baron, 2008; Cardon, Foo, Shepherd, & Wiklund, 2012).

Entrepreneurial emotions are affects, emotions, moods and/or feelings, at both individual and collective level, which are prior to, simultaneous with and/or resulting from the entrepreneurial process, as previously defined. (Cardon, et al., 2012)

Though research in affect and entrepreneurship has been progressing, scholars have focused only on early or late stages of the business life cycle, by studying the influence of emotions on risk perceptions and preferences involved in the early-stage process of opportunity recognition and by evaluating and analyzing the emotional antecedents and consequences of an entrepreneurial failure (Foo, 2011; Shepherd, Wiklund, & Haynie, 2009).

Future research suggestions move towards more focused topics, such as the examination of emotional influence on the entire entrepreneurial process and the effect of emotions on business activities over time and at various stages of the life cycle (Cardon, Foo, Shepherd, & Wiklund, 2012). The analysis of the phenomenons occurring during the entrepreneurial process is frequently focused on the entrepreneur's passion, intended as the driver of an intense inclination towards specific activities action, which involves determination, optimism and desire to succeed (Murnieks, Mosakowski & Cardon, 2014; Smilor, 1997).

Additionally, scholars are encouraged to adopt a *longitudinal perspective* over the entrepreneurial process, intended as a series of ongoing independent and interdependent emotional events occuring over time with different volume, velocity and volatily, which result also in affective consequences and environmental changes. (Cardon, Foo, Shepherd, & Wiklund, 2012). A deeper understanding of the temporal dynamics behind these processes would enable academics and entrepreneurs to address particular issues surrounding it (Morris, Kuratko, Schindehutte & Spivak, 2012).

Research on affect should be integrated with the identity-related one. The dynamic and complex environment, which entrepreneurs deal with on a daily basis, has increased the importance of developing an *organizational identity, shared* by all the business members. This is intended as the cognitive structure defining the characteristics of the organization, the path it intends to follow and the goals to be achieved (Albert, Ashforth, & Dutto, 2000).

Individuals, teams and organizational performance in financial, market and value terms is highly influenced by affect, identity and passion. Nowadays, the latter has become the study object of intense study, because of its role in linking affect and identity (Cardon, Post, & Forster, 2016).

Current research on these topics has been focusing mainly on lone entrepreneurs (Cardon, Foo, Shepherd & Wiklund, 2012). However, most business ventures are *founded by entrepreneurial teams*, which have resulted to be more successful than enterprises founded by an individual entrepreneur (Cardon, Post, & Forster, 2016). In order to better address business-related issues and dynamics, it is relavant to enlarge the focus of research on emotions and on passion to founding teams and to individuals as team members, rather than individuals.

The aim of this chapter is to review the currently available literature on entrepreneurial passion both at individual and team level, while integrating it with empirical evidences, in order to provide a clear theoretical framework to enable a better understanding of the dynamics occurring within startups, considered as New Venture Teams, in the earliest stages.

2.2 Affective concepts

2.2.1 *Affect*

The combination of experienced feelings and emotions influencing cognition is defined *affect*. This influences the entire cognitive process at an ongoing pace. It is relevant to note that *cognition* refers to

how information is captured, managed and recouped for future use. According to literature, two types of affect can be identified: *state* (*or event-generated*) and *dispositional* (*trait*) (see Isen, A.M., 1999 in Baron, 2008). The former is characterized by mood changes resulting from external events. Conversely, dispositional affect is the overall tendency to react in a predictable way across different situations, which is part of one's personality trait.

The understanding of the process leading to the influence of moods and emotions in groups requires individual group members' affective personalities and experiences as input. Affect is a broad concept, as it goes from anger and love, which area-specific and intense emotions, to generic and long-term moods, such as depression and cheerfulness, and finally to affective appraisals. By consequence, the definition of group in terms of affective composition is the result of dispositional (trait) affect, mood, intense emotions, emotional intelligence and sentiments (Kelly & Barsade, 2001).

In order to focus on the role of affect in the entrepreneurial process, Baron (2008) refers to *positive and* negative affect, as both the state and the dispositional affect have different impacts in various situations, such as perceptions of the external environment, creativity, tendency to engage in heuristic processing and way of coping with acute stress. Conversely to negative affect, positive feelings tends to enhance individual's inclination to sense objects, individuals and ideas in a more favourable way, to increase their creativity and to rely on their experential past in decision-making and problem solving.

2.2.2 *Identity*

Identity is represented by the most important *features*, *characteristics* and *experiences* of an individual, involving his/her interrelations and social, self-regulating functions (Vallerand, et al., 2003). Social psychology defines identity as a *set* of qualities, beliefs, expressions and responses, or better, as a *set* of cognitions individuals have in relation to their role in the society (role identity), to the group they belong to (group identity) and to the differentiating characteristics they want to have to be unique (person identity) (Stryker, 2000; Stets & Serpe, 2013).

2.2.3 Passion and the Dualistic Model

Philosophers have defined passion along *two different perspectives*. The first one considers it as a *force controlling people*, that makes them lose rationality and self-discipline. The other approach define passion as a *positive element controlled by people*, raising strong emotions and enhancing inherent active behaviors in the individual who is experiencing passion, where passion represents the necessary element to reach excellence in the performance level (Vallerand et al., 2003).

Starting from the Self-Determination Theory, Vallerand et al. (2003) define passion as "a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy", in order to satisfy the needs of autonomy, competence and relatedness. The passionate activity will then be internalized in the individual's identity, becoming a fundamental part of who they are. Passion is the element that makes each people's life worth to be lived, by providing motivation,

well-being and meaning of every day life. Considering the motivational element, people tend to spend time and effort to reach their high-priority goals on passionate elements, resulting in emotionally relevant outcomes. When an individual likes and regularly performs an activity, this will turn into a passionate activity, which is part of the personal identity. *High performance levels* can be achieved after long and ongoing processes of learning activities, during which the individual improves and refines its abilities and skills to grow and improve (Vallerand et al., 2007).

Depending on how the passionate activity is made part of one's identity, Vallerand et al. (2003; 2007) distinguish between harmonious and obsessive passion, which result in different affective and behavioral effects. The Dualistic Model of Passion proposed by psychological research is considered the most appropriate to explain the different shades of passion, thus being adopted as the reference point for the definition of and the related studies on entrepreneurial passion. Harmonious passion occurs when an individual autonomously internalizes an activity, without any external pressure. The motivationdriven engagement in the passionate activity is spontaneous and extremely flexible, leading to a complete engagement. This type of passion represents the authentic integration of the activity in selfidentity, maintaining openness to other positive experiences related to other domains. The result is a strong motivational force in performing the activity and in the ability to manage it in a balanced way in the person's life. Harmonious passion results to encourage both general positive affect, even when the individual is not engaged in the activity, and to enhance healthy persistence, which leads to disengagement when the passionate activity results in negative effects. Conversely, an obsessive passionate activity is internalized to accommodate intrapersonal, interpersonal or external pressures, such as self-esteem or social acceptance. Even if people like the activity, they feel obliged to perform it, being it out of their control. Obsessive passion tends to cause confusion and conflicts with other daily routines and to generate negative feelings, when the activity performance is concluded. In fact, the passionate activity assumes an unbalanced position in one's identity, as it leads the passionate individual to an unproductive, rigid persistance in carrying out the activity, especially when the activity performance leads to negative outcomes for the individual, to conflicts with other elements of life not related to the specific activity, to mental distress and negative emotions experience, both cognitive and affective, when the individual is not performing the passionate activity (Vallerand, et al., 2003).

A measure of high and low entrepreneurial passion, which can be respectively related to obsessive and harmonious EP, is provided by a sample investment scenario provided to angel investors to carry out a research (Murnieks, Cardon, Sudek, White, & Brooks, 2016). *Obsessive EP* is referred to as Driven (high) entrepreneurial passion. It is typical of individuals being obsessed with being an entrepreneur, as it is highly central to their identity. Guilt is experienced when not working on the business and the balance with other non-entrepreneurial tasks is often missed, as enthusiasm of being an entrepreneur overcomes. *Harmonious passion* is referred to as *Balanced (low) entrepreneurial passion*, characterized by the entrepreneur's enjoyment in being the founder of a business venture, even if it is not salient for his identity. Individuals related to this type of passion are not obsessed by business development, as entrepreneurship is a career-related element, while the main life focus is to maintain a work-life balance.

2.3 Entrepreneurial Passion

A review of literature on *entrepreneurial passion at individual level* is provided, in order to better understand the dynamics of passion at team level. This topic has recently started to become the focus of researches and studies, in order to obtain additional insights on the role of emotions in entrepreneurship (Smilor, 1997; Cardon, Zietsma, Saparito, Matherne, & Davis, 2005; Baum & Locke, 2004; Cardon, Wincent, Singh, & Drnovsek, 2009b). However, all related studies have adopted the perspective of soloentrepreneurs, who perform individually the activities of opportunity recognition, venture creation and venture growth (Baron, 2008; Cardon, et al. 2009b).

2.3.1 Definition of Entrepreneurial Passion

Starting from the Dualistic Model of Passion (Vallerand et al., 2003), a clear definition of entrepreneurial passion has been developed by *Cardon, Wincent, Singh, & Drnovsek, (2009b)*, in order to study sistematically both the origin and the determinants type of passion and to better understand its influence on the entrepreneurial process, by combining research results on emotions, identity and entrepreneurship. The common elements arising from the comparison of the literature on passion from psychology and on related entrepreneurial emotions have represented the starting point for developing a conceptual definition of entrepreneurial passion. The basic *entrepreneurial passion-related concepts* are:

- i) passion as an intense positive emotion;
- ii) the main objects of passion can be identified in venture-related opportunities, tasks or activities;
- iii) the most notable *effect of passion* on entrepreneurship is the emergence of motivation to overcome challenges and difficulties, while remaining engaged to the business venture.

Academic literature agrees on associating entrepreneurial passion to various positive affects, such as pride, joy, enthusiasm, reprensenting the emotional tool providing strong will and personal strength for coping with entrepreneurial challenges. In the specific, entrepreneurial passion is defined as "consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon, et al. 2009b, pg. 517).

It is the profound feeling of desire expressed by the entrepreneur for certain prominent activities, which provide the individual's self-identity with meaning. It most be noticed that this definition does not distinguish among harmonious and obsessive passion.

In order to fully understand the definition provided, it is useful to refer to the *workable definition of* "feeling" identified by Cardon et al. (2009b), referring to a conscious experience of changes in a person's core affect depending on external stimuli, whose processing, storing and retrieving process requires additional resources. The elementary and conscious affective feelings, such as upset, tense, happy, excited, etc., represent the "core affects". These can change regularly and repeatedly over time; they are independent from external events and they occur without cognitive effort. Core affect can be

represented along two dimensions: a) *valence*, identified by pleasure and displeasure, and b) *intensity*, characterized by activation and de-activation.

The former part of the definition of entrepreneurial passion refers to the feeling involving conscious changes in the internal mental, emotional and affective state of the individual, which will become part of his or her experience and will also drive him or her into deep reflection. Unlike occasional modifications in the core feelings and emotions affecting cognition, which occur unconsciously as resulting from external forces, passion involves *intentional processes* in order to perform entrepreneurial activities being relevant for one's identity and life meaning (Cardon, et al., 2009b).

2.3.2 Passion as intense positive feeling

This first assertion in the definition of entrepreneurial passion is the result of previous studies on passion. In the last years, psychologists who have been studying such type of affect have focused on its characteristics of *conscious experience, motivational driver and identity influencer*. Some scholars have related passion to a strong inclination for performing activities that are liked or loved by the individual, in which time and effort is invested as the activity is considered important for self-identity (Vallerand et al., 2003). Others relate it as long-term emotional goals driving longings, plans and behaviors, regardless challenges and costs (Fridja, Mesquita, Sonnemans, & Van Goozen, 1991). However, even if differing on certain elements, psychological literature on passion agrees in characterizing it as an *emotional state*, which *enhances motivation* and which *drives action toward a specific activity or a set of activities embodying certain values* (Chen, Yao, & Kotha, 2009). Entrepreneurial literature converge in defining passion as an *intense positive emotion*, especially related to *positive affect*. In fact, authors have defined it as "love for work" (Baum & Locke, 2004, pg. 588) *tied to affective status* such as enthusiasm, zeal and desire, motivating people to achieve high-level goals and to deeply desire the creation of a relevant self-identity role, while behaving coherently in the entrepreneurial activities (Smilor, 1997).

Cardon et al. (2009b) have developed passion-related constructs on these different perspectives, leading to an overall definition. This has been integrated also by following authors, who have highlighted both the *resulting intense emotional experience* combined with behaviors and actions to follow passion, and the *ambivalent emotions arising*, which can be both positive and negative. The cognitive and behavioral responses arising from passion are extremely salient to the entrepreneur, as they have a high personal value to him (Chen, et al., 2009). To resume, entrepreneurial passion is *not a personality trait* (Vallerand et al., 2003), but it is the experience of deeply positive affective states when activities which are important to the entrepreneur are performed or simply taken into account. Passion, in fact, is "consciously accessible", as individuals may find themselves thinking about passionate activities and about the feelings' intensity when accomplishing other tasks. By consequence, these feelings are *longer-lasting* compared to instinctive and sporadic emotions arising from external forces (Cardon, et al. 2009b; Cardon, Gregoire, Stevens, & Patel, 2013a).

2.3.3 Identity centrality of passionate activities

The second part of the definition focuses on passion-driving activities, which are considered as meaningful and salient to the entrepreneur's self-identity. Entrepreneurial actions are enhanced by entrepreneurial roles and identities, through passion. The self-identity component focuses on the relevance of passion for the subjective idea of himself/herself a person has. In turn, intense feelings arise when performing activities which are central to the individual's self-identity (Cardon, et al., 2009b). Baum & Locke (2004, pg. 588) have identified the empirical expression of the passion experienced by the entrepreneur in the long hours spent spent by the entrepreneur in performing activities related to the venture startup and growth and in the non-separation of the entrepreneur's personal achievements and failures from the business venture ones. The "love of one's work" can be measured by love, attachment and desire-related emotions. Entrepreneurial passion for work is expected to help entrepreneurs to face challenges, deal with resource constraints and survive in an uncertain environment, as it enhances preseverance (Baum & Locke, 2004). As passion involves positive feelings when pursuing challenging but highly valued goals, it represents one of the entrepreneur's drivers when setting and managing the business venture (Smilor, 1997). Passion is relevant for a person's self-identity as the conscious process of internalization of a passionate activity (positive affect) provides life meaning to people. However, negative affect may lead to self-destruction because of the negative consequences of obsessive passion towards an activity (Vallerand, et al., 2003). Scholars have claimed the role of identity in defining passion, focusing especially on the relationship between entrepreneurial passion and entrepreneurial self-identity (Vallerand, et al., 2003; Cardon, et al., 2009b), even if there is a lack of empirical evidence of this relationship (Yitshaki & Kropp, 2016). Notwithstanding the importance of identity in the study of entrepreneurial passion related aspects, entrepreneurial literature associated to both the meaning attributed to the role identity and the identity centrality aspect still lacks of a focused theoretical research and empirical evidence.

Identity is constituted by the shared set of meanings characterizing each person as an unique individual, as part of a society and, of a group, as previously explained. *Meanings* are represented by the internal assumptions on the characteristics considered as core by the individual for his- or her-self in the different roles to be assumed. It is important to highlight the plurality and the different types of identities each person can assume (Stets & Serpe, 2013). *Identity salience* is a concept deriving from the idea of self as composed by multiple identities. It is claimed to represent the probability of assuming an identity and behaving accordingly in multiple situations because of the individual's cognitive framework (Stryker, 2000). However, following research results found that entrepreneurial identity salience is not correlated to passion, while identity centrality has a significant role in defining the flow of passion (Murnieks, Mosakowski, & Cardon, 2014).

2.3.4 Entrepreneurial passion for specific domains

Three specific entrepreneurial role identities have been identified as the focus of feelings and identity centrality for the entrepreneur, which can be assumed by individuals when performing business venture-related activities (Cardon, et al. 2009b). This classification has been considered as the starting point of the majority of consecutive literature on entrepreneurial passion (Cardon, et al., 2013a; Cardon, Post, & Forster, 2016; Chen, et al., 2009). Different sets of tasks and activities are associated to each role, representing the multi-dimensional essence of entrepreneurial passion. Even though an individual may be passionate about simply being an entrepreneur, in order to better identify and measure passion, the three distinct entrepreneurial roles consistent with the entrepreneurial processes are:

- i) Inventor identity: the entrepreneur has a passion for inventing, which is connected to searching for, recognizing and/or inventing new opportunities, looking for new ideas, working on the new product development, analysing the environment to detect disruptive innovations, motivated by the desire to introduce new solutions in the market. Entrepreneurs being more passionate for performing these activities experience positive feelings when finding new ideas for products or services or new solutions to needs or problems, when spending time on seeking for new opportunities, when working on product design and its concrete applications;
- ii) Founder identity: passionate activities related to this role are about the creation of a business venture aiming at turning an idea into a business, the exploitation of new opportunities, the collection of financial, human and social resources to create the business venture and enter the startup phase. Generally an entrepreneur strongly passionate for founding tends to identify himself with the business identity and to launch more than one venture over the life course and to often enter business exit operations, as his/her aim is to become owner of business ventures. These entrepreneurs are often serial entrepreneurs;
- iii) Developer identity: the entrepreneur's passion is for performing activities related to developing the venture at advanced business stages, in order to nurture, grow and expand the business, to develop the market and the customer base, to increase the financial value of the venture and, finally, to make the organization and its members improve. It is possible that a high passion for developing is experienced by non-entrepreneurs who enter an existing startup and lead it to a sustainable and valuable business. Individuals experiencing passion for developing usually approach to management in different ways: they tend to focus the business' external communication on expansion plans; they usually feel positive when increasing the human resource base; they experience positive feelings when implementing effectively marketing&sales activities or when increasing the base of potential investors.

Each individual can appear passionate about one or more types of identity-related activities and with different intensities. In fact, an identity can be more salient and central than another, leading the entrepreneur to be more motivated and committed to a certain role. However, *multiple identities* encourage the individual to focus on internally organizing the different identities, combining them among each other. This could lead both to harmonious passion or to obsessive passion, depending on

whether the entrepreneur can easily transit among different identities or on whether one of the identities is not coherent with others. The *effort and time* spent in performing role identity-related activities, disengaging from non-meaningful ones, is driven by the motivation arising from a salient role identity. The *experience of entrepreneurial passion may change* over the entrepreneur's life, according to the entrepreneur's gender, age and educational level, to the difficulties to be faced in a particular moment, to the changing contexts, to the new life experiences and backgrounds, to the number of firms previously founded and to the stage of the current business venture. While the importance attributed to different role identities can *change over time*, at any given time the individual's self-identity and the related behaviors are *temporally coherent* as the salience of each role identity does not change in a short time frame (Cardon, et al., 2009b; Cardon, et al., 2013a).

Engagement in activities within a salient identity usually results in an *affective experience*, from which both positive and negative affect may arise. The performance of activities related to a salient role identity lead to the development of positive emotions and motivation, when behaviors are coherent with it and enhance it. Conversely, if behavioral responses are contrary to the ones cognitively identified by the individual, the performance of activities related to the individual role results in negative feelings and tendency to disengage (Cardon, et al., 2009b).

2.3.5. The experience of entrepreneurial passion

When an individual is or becomes passionate for the performance of activities related to a certain entrepreneurial role, emotional experiences arise, involving both *brain reactions*, through appraisals and cognitions, and *body-related phsychological and behavioral responses*. This complex configuration of responses, which are activated and maintained by passion, provide *motivation and coordination towards goal achievement*, when they are controlled (Cardon, et al., 2009b). *Emotional experience* is a process involving four main steps achievement (see Russell and Barrett (1999) in Cardon, et al., 2009b):

- 1) the appraisal of an environmental stimuli based on affect;
- 2) the *experience of changes* in core affect, related to prior stimuli;
- 3) the action towards or away from the external incentive;
- 4) the activation of body and brain responses related to the goal.

A conceptual model of the experience of entrepreneurial passion has been developed by Cardon, Wincent, Singh, & Drnovsek (2009b), which highlights the role of behaviors and cognitions and of the related self-regulation processes in leading entrepreneurial passion towards effective achievement of entrepreneurial goals. In order to pursue business objectives, the focal identity must be *validated by behaving in a coherent way* with respect to positive emotions in the activity performance. In the proposed framework, *self-regulation processes* are made of both *goal-related cognitions* and of entrepreneurial behaviors. The former correspond to the specific entrepreneurial role identity and include goal challenge, goal commitment and goal striving. On the other hand, *behavioral engagment* by passionate entrepreneurs in identity-specific activity involves: a) creative problem solving, considered as the research of innovative solutions, ideas or actions to problems; b) persistence, which is

the continuous action performance notwithstanding difficulties, failures or external oppositions; c) absorption, defined as the total engagement in tasks and activities' performance.

The *potential outcomes of the entrepreneurial goals* are connected to the role identity and are represented by:

- i) Opportunity recognition, which involves Innovativeness and Usefulness. It is usually the entrepreneurial goal for individuals passionate about the inventor identity. Creative problem solving affects entrepreneurial effectiveness in identifying and pursuing new opportunities, especially when the inventor identity is central.
- ii) *Venture creation*, which aims at collecting financial, human and social capital. It reprensents the goal related to the founder identity. Thanks to passion's effects on persistence and creative problem solving, entrepreneurial effectivess in the pursuance of this specific goal is positively affected in the case of entrepreneurs with a strong founder identity.
- iii) Venture growth, in which the entrepreneur passionate about developer identity aims at reaching sales/profit, market and firm growth. Especially when the developing role identity is dominant, passion enhances entrepreneurial's effectiveness because of its direct effect on absorption and persistence. A recent research focused on passion for developing a venture suggests that directing entrepreneurial passion towards the identification of challenging business goals and increasing commitments towards these enable entrepreneurs to realize a higher venture growth (Drnovsek, Cardon, & Patel, 2016).

Theoretical researches focus on how entrepreneurial passion affects and drive the entrepreneur's effort. However, as entrepreneurial passion develops over time, in a dynamic perspective *changes in passion* are a *consequence of entrepreneur's effort* (Gielnik, et al., 2015). Entrepreneurial passion has both direct and mediated effects. Entrepreneurs experiencing passion are more likely to develop and pursue creative, unusual solutions. However, too intense passion may lead to rigid engagement in related activities and to resistance in the search of innovative solutions. Moreover, passion enhances the entrepreneur's persistence on task which are relevant to his/her identity. In addition, absorption with entrepreneurial activities is enhanced. Entrepreneurial passion influences behaviors and effectivenesss also through mediated effects. In fact, entrepreneurial passion affects the level of challenge in goal setting, the entrepreneur's commitment and the type of striving towards goal achievement. Goal cognitions impact on creative problem solving, persistence and absorption, thus impacting on entrepreneurial effectiveness (Cardon, et al. 2009b).

2.3.6 The downsides of obsessive entrepreneurial passion

The majority of research on entrepreneurial passion has focused on its positive influence on driving organizational outcomes and performance. However, scholars have advanced the need to give relevance to downsides of passion, as they may negatively impact on the overall business and team performance (Cardon, Zietsma, Saparito, Matherne, & Davis, 2005). Even though passion for an entrepreneurial

venture increases motivation in carrying out activities and commitment when facing business difficulties, it may also lead to (Cardon, et al., 2005; Vallerand, et al., 2003):

- o Activity persistence also when the business venture is close to failure;
- Entrepreneur's difficulties in admitting wrong choices or the unsustainability of the business idea;
- o Entrepreneur's unbalanced personal self-denials for the venture's success;
- o Ruin of personal relationships with families and friends;
- o Experience of anxiety and depression.

The distinction between harmonious and obsessive passion (see the Dualistic Model of Passion by Vallerand et al., 2003) is extremely relevant, as it can help to explain the effects of passion on goal achievement and on the performance-related processes. In fact, research asserts that harmonious passion is characterized by a focused execution of performance processes, leading individuals to be extremely effective in goal achievement. Subjective well-being has been found to improve if related to harmonious passion. Conversely, obsessive passion drives individuals to perform goal-related activities in different ways, which may impact both positively and negatively on performance. Moreover obsessive passion has negative or no influence on the subjective well-being of an individual (Vallerand, et al., 2007). Focusing on the financial performance of the business venture with respect to the centrality of the entrepreneur in the social network, Ho and Pollack (2014) provide empirical evidence of the detrimental effect of obsessive passion on financial performance, because of the defensive behavior adopted by the entrepreneur when interacting with other people. Conversely, harmonious passion increases the probabilities of financial success, as the passionate individual is more proactive in social interactions.

2.3.7 Relevance of passion in organizations

Passion is an intense positive feeling connected in a meaningful way to one's identity. As it influences the individual's cognitive and behavioral elements, it influences key elements of the entrepreneurial process. In fact, despite the previously explained *risks* occurring from negative influences of passionate behaviors, entrepreneurial passion has mainly *productive effects on people, teams and organizations*, affecting both entrepreneurial behaviors and organizational outcomes (Baum & Locke, 2004; Murnieks, Mosakowski, & Cardon, 2014)

Among the influences of passion on organizational outcomes there are:

Passion and motivation lead to a *higher investment of time and effort* in the business venture (Foo, Uy, & Baron, 2009; Cardon & Kirk, 2013). The results of an empirical study on the relation between entrepreneur's affect and his/her effort shows both positive and negative affect increase the venture efforts on tasks. However, the experience of positive feelings increases the effort on business tasks to be performed both immediately and in a long-term perspective, while negative ones have an influence only on business activities to be promptly performed (Foo, et al., 2009). The feeling associated with entrepreneurial passion motivates the individual to immerse in and work hard on business activities (Gielnik, et al., 2015);

- ii) Passion shows a *positive mediation effect on venture growth*, in combination with entrepreneurial traits and skills, such as tenacity and new resource skills (Baum & Locke, 2004). Entrepreneurial passion, especially for developing, has a positive relationship with venture growth as it motivates the entrepreneur to concentrate efforts in performing activities for expanding the business, mediated by goal commitment and partially by goal challenge (Drnovsek, Cardon, & Patel, 2016);
- Positive feelings are experienced when individuals are successfully performing activities; thus, passion increases according to a *greater self-efficacy for a specific action*. In order to overcome challenges arising when setting-up and running a venture in a dynamic environment, passion is essential. Entrepreneurial passion for inventing and founding appears to be the *mediator for the translation of self-efficacy into the entrepreneur's greater persistence*, required to overcome entrepreneurial difficulties (Cardon & Kirk, 2013);
- iv) Ventures whose entrepreneur shows strong passion and better preparation on their business plan tend to gain a *better external evaluation* and to have *higher opportunities for receiving angel investors' attention and investment*, depending on the stage in the funding process (Sudek, 2006; Chen, et al., 2009; Cardon, Sudek, & Mitteness, 2009). A recent study on the impact of passion, tenacity and inspirational leaderships on angel investing shows that a combination of tenacity and passion drives investors' decisions. Entrepreneurial passion is not simply an *indicator of the presence of tenacity and leadership in the entrepreneur*, but it is an *expression of the founder's close identification with and affect for the business venture*, leading to creative problem solving and venture growth (Murnieks, Cardon, Sudek, White, & Brooks, 2016);
- v) The combination of *strong passion and high tenacity*, referred to as the willingness to invest time and to sacrifice personal life, *increases the probability of investment by angel investors*;
- vi) *Employees' commitment is higher* if there is a perception of the entrepreneur's passion for the business venture (Breugst, Domurath, Patzelt, & Klaukien, 2012);
- vii) Passion is a micro-level variable *influencing entrepreneurs' proneness to experience affective positive feelings*. In turn, affect positively *influences the entrepreneurial processes*. In fact, positive affect: a) increases the entrepreneur's creativity in recognizing new opportunities; b) enhances the persuasive skills of the entrepreneur when collecting strategic resources; c) increases the entrepreneur's effectiveness in making decisions to adapt to changes occuring in a dynamic and uncertain business and social environment; d) improves the working environment and the relationships with and among workers (Baron, 2008);
- viii) Positive effects on self-efficacy and on entrepreneurial behaviors results from the performance of activities related to the individual entrepreneurial identity (identity centrality), which result also in a greater passion experience (Murnieks, et al., 2014);
- ix) Even if setting different well-being and goal-achievement processes, both harmonious and obsessive passion are found to *indirectly facilitate performance realization*. In fact, the implementation of highly-structured activities in order to improve performance (ie. *deliberate*

practice) is positively related to goal attainment because of the consequent learning opportunities and acquisition of skills (Vallerand et al., 2007);

- x) The entrepreneur's passion affects his/her *network centrality*. Especially in the business environment, this is extremely relevant, as the ability to leverage personal connections with external stakeholders may ease the collection process of strategic resources, information and opportunities (Ho & Pollack, 2014);
- xi) Obsessive passion may lead entrepreneurs to *ignore feedbacks from potential investors* and consider them as personal attacks (Ho & Pollack, 2014).

The understanding this affective construct's influence requires to consider that the type of entrepreneurial passion experienced by individuals themselves is different from the one displayed to others, for example through body language during a business pitch to investors (Chen, et al., 2009), and from the externally perceived one, for example when interacting with angel investors (Sudek, 2006).

2.4 Team Entrepreneurial Passion

In order to perform empirical research on team entrepreneurial passion, it is essential to review current literature on entrepreneurial teams, with a special focus on the definition of New Venture Teams (NVTs).

2.4.1 New Venture entrepreneurial teams

Venture creation is mainly a *process involving entrepreneurial teams* rather than solo-entrepreneurs. *Entrepreneurial teams* (or *founding team* or *startup teams* or *NVTs*) have *different definitions*, depending on whether only individuals with financial interests in the venture are considered or all those having an active role in the business.

According to the most adopted definition of New Venture Team, a *team leading a new venture* is formed by more than one individual with both a financial and managerial role in the business venture (see Chowdhury, 2005). When focusing on management-related issues of the new venture firm, it is suitable to consider it as the *group of people responsible for strategic and operational business decisions* required in the creation and management process of a new business venture (see Drnovsek, et al., 2009; Klotz, Hmieleski, Bradley, & Busenitz, 2014).

2.4.2 Team entrepreneurial passion

The consideration of the entrepreneurial team as composed by individuals in charge of strategic and operational business tasks has been used by Drnovsek, Cardon, & Murnieks (2009, pg. 193) to identify collective passion as "the combined entrepreneurial passion experienced by members of a team of

entrepreneurs, including potential differences in the level of focus and intensity of each member's individual passion".

Arising from the combination of individual entrepreneurial passion definitions and team-related literature, *Team Entrepreneurial Passion (TEP)* has been clearly defined as "the level of shared intense positive feelings for a collective team identity that is high in identity-centrality for the new venture team" (Cardon, Post, & Forster, 2016, pg. 8).

Literature on entrepreneurship has been approaching to business dynamics and issues from a team-level perspective, as *entrepreneurial teams* are more effective than an individual entrepreneur in dealing with the continuous changes in the uncertain and dynamic business context. Moreover, *team heterogeneity* has resulted to enhance organizational outcomes. In fact, mainly because of team members' different experiences and background, because of variety in mindsets and ways of doing and because of the larger set of interpersonal connections, team-founded business ventures are often more successful than those set up by a single person. However, *team's effectiveness* is the result of internal team dynamics (Chowdhury, 2005; Drnovsek, et al., 2009). Among the most complex ones likely to occur within teams, *affective processes* are the most relevant ones. In fact, they have a direct influence on both team and venture's processes and outcomes, in addition to significant consequences on team members (Kelly & Barsade, 2001; Barsade & Gibson, 2012).

The team organization is influenced by differences in race and gender (ie. demographic diversity), in attitudes or values (ie. cognitive diversity) and personality factors (ie. trait positive affective diversity). The latter are intended as the difference among team members in the degree to which individuals are cheerful and energetic or quiet and restrained. The team's affective diversity is the result of the sum of affective fit among each team member. Fit is related to the extent people share common traits on various dimensions and it is reknown that people prefer to work and relate with people sharing a similar set of demographic, cognitive and personality characteristics, because of similarity-attraction. The fit among members' affective states can be communicated by affect, such as entrepreneurial passion. On the other hand, affective similarity represents an evidence of fittingness of a certain emotion in the group context for individuals, which in turn enhances attraction among similar team members (Barsade, Ward, & Turne, 2000). For this reason positive affective diversity impacts on each group member's mental state, on group processes and cohesion and on the business venture organization and performance, as affective similarities and differences influence the entire work environment (Drnovsek, et al., 2009; Barsade, et al., 2000). Positive affect is closely related to the relational processes occurring within the group and impacts on many organizational aspects of the business venture, such as job satisfaction or work performance, through moods.

In order to adapt the theoretical framework on affective similarity within teams by considering entrepreneurial passion as the trait positive aspect, a team classification according to the member's entrepreneurial passion domain is provided by literature (Drnovsek, Cardon, & Murnieks, 2009, pag. 110).

The team compositions identified are:

- i) Balanced passion team, which is composed by individuals passionate for at least one entrepreneurial role and at least one member feels passionate for each role identity;
- ii) Focused passion team, whose members are all passionate for the same domain;
- iii) *Mixed passion team*, made up of both individuals experiencing entrepreneurial passion and members who do not feel passionate about any entrepreneurial role identity.

2.4.3 The Conceptual Model of Team Entrepreneurial Passion Emergence and Influence Cycle

Most new ventures are founded by teams, thus it may be relevant to understand how and if team member's entrepreneurial passion changes over time, due to the effect of identity and affective team dynamics. In order to observe the emergence and influence dynamics of team's shared entrepreneurial passion, also considering the temporal element, the conceptual model of the Team Entrepreneurial Passion Emergence and Influence Cycle (Figure 2.1) proposed by Cardon, Post, & Forster (2016) may be empirically applied. This model is made of different elements which are contained in *boxes: inputs* such as Individual Entrepreneurial Passion and the consequent Team Passion Diversity and misalignment; Team Entrepreneurial passion; the influence of team passion for work through Emergence and Influence processes on Team *Outcomes*, on the Individual Passion and on the choice of entry in or exit from the startup. TEP emerges and modifies according to *internal dynamics*, highlighted by the model with *arrows*, involving Affective and Identity Processes, which are included in the round dashed shapes.

Two sets of processes occur to explain the changes in TEP: *bottom-up processes* (or Emergence processes) drive entrepreneurial passion from an individual level, represented by team diversity, to the emergence of TEP; *top-down processes* (Influence processes) highlight the role of TEP in influencing each member's passion and his/her possible choice to exit the team (Cardon, et al., 2016).

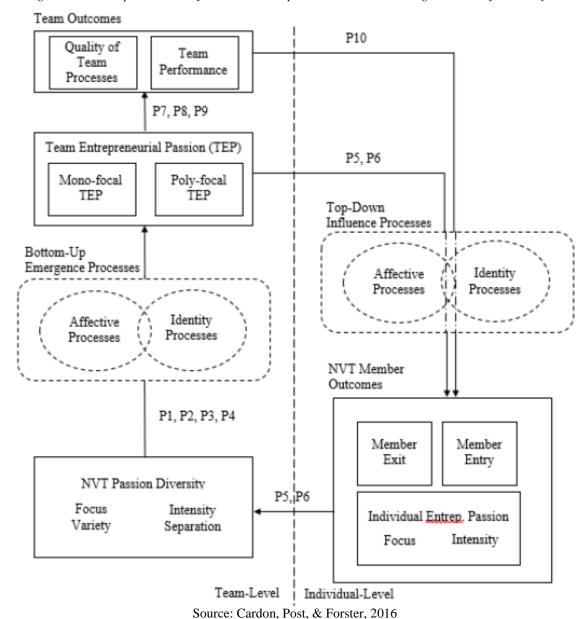


Figure 2.1: Conceptual Model of the Team Entrepreneurial Passion Emergence and Influence Cycle

i) Individual-level Entrepreneurial passion

This construct is built starting from the individual-level entrepreneurial passion and adapted to the team-level one, also considering the impact of team passion diversity. The individual entrepreneurial passion refers to the definition provided in Cardon, Wincent, Singh, & Drnovsek (2009b) and previously outlined. The main features to be considered as relevant are:

- o the intensity of the positive feeling;
- o the *relevance* of passion's focus *for the self-identity*, leading the individual to enact identities which are higher in salience;
- o the focus of entrepreneurial passion on inventor, founder and developer roles;
- o the *positive effects* of entrepreneurial passion on the business venture's performance, contrasted by negative effects when passion turns obsessive.

ii) Team entrepreneurial passion

At team level, entrepreneurial passion focus and identity-centrality can be detected by each team member's opinion on "what is the team, overall, passionate about?" and "how passionate is the team for inventing, founding and developing?" (Cardon, Post, & Forster, 2016, pg. 11).

The paper from which this model has been retrieved is the first to deeply examine new ventures team entrepreneurial passion; by consequence, the team's experience of passion and the identity-centrality of it is assumed as comparable to the ones at individual-level. However, the individual entrepreneurial passion of each team member is *independent from the collective construct*. By consequence, even if the individual does not feel stongly passionate for a certain role (eg. developing), the team may still experience intense passion for it, thus affecting him/her.

Two types of TEP are considered, in order to account for each member's affective diversity in focus and intensity (Cardon, Post, & Forster, 2016):

- Mono-focal TEP: the team has a mono-focal shared team identity, as all members have the same identity focus. Intense feelings arise when performing the same related activities. Team members being passionate for the same collective identity role lead to a mono-focal TEP;
- O Poly-focal TEP: all team members agree on the team being passionate for a shared identity with multiple foci, as each individual identifies with a role different from the others. The experience of entrepreneurial passion occurs when performing activities related to multiple and different objects (inventing, founding and developing).

Team Entrepreneurial Passion is more likely to develop in teams with *not extremely high levels of conflicts and of exit rate*, and with at least one member with a *moderate passion* for an entrepreneurial role, as the individual's affective tone is critical for the development of the collective passion.

iii) Team passion diversity

The variance of passion within group members in terms of focus and intensity of each team member's passion, emphasized by the definition of collective passion (Drnovsek, et al., 2009), is taken into account by the model in the construct of Team Passion Diversity. As individual entrepreneurial passion varies in terms of focus and intensity, team diversity can occur on the same dimensions. "Passion focus variety" refers to the different identity roles team members feel intense positive emotions for This will be low when individuals will all be passionate for the same entrepreneurial role (for inventing, for founding, for inventing). Variety will be high if each members experience positive feelings according to different roles. "Passion intensity separation" emphasizes the different degrees of strength of the positive feeling experienced. If all individuals feel passionate at a same extent, this dimension is low. Conversely it rates high when all team members experience passion differently, some being less passionate than others about a certain role (Cardon, et al., 2016).

iv) The model dynamics: Bottom-up emergence processes

The basic assumption underlying the model is that new venture team tend to develop a collective passion as a result of affective and identity processes arising from individuals being passionate about different roles at different levels of intensity. According to the extent of entrepreneurial passion diversity among team members, the resulting type of collective identity and the effects on team outcomes are different, mainly because of the activitation of different types of processes.

When team members individually tend have similar focus and intensity of entrepreneurial passion, leading to a low team passion diversity, a mono-focal TEP is more likely to emerge as a result of emergence processes, referred to as passion convergence processes. These are distinguished between affective processes, such as similarity-attraction processes between individuals and affective transfer, and identity formation processes, such as identity imprinting, enactment and conformity processes (Cardon, et al., 2016). The following theoretical explanation intends to integrate the one associated to the model.

Similarity-attraction processes

Group affect is a force influencing individual's emotions, defining people feelings and expressions, enhancing group cohesiveness and signaling the group's temporal maturity level. Group members' emotions converge to form a group-level affect, which makes individuals to exhibit new characteristics. This outcome is the result of two main processes: impulsiveness and mass contagion. The former leads groups to concretize ideas in a quicker way than individuals performing alone. The latter process consists of group members's tendency to imitate and exaggerate group characteristics, which is intensified by mutual interaction (Barsade & Gibson, 1998). According to the research of J.M. George (1990), individual positive and negative affectivity traits are related to the group affective tone, which in turn impacts on group behaviors.

Group emotions can be analyzed along *three dimensions*: a) as a *mean level* of individual dispositional affect (ie. personality characteristics related to the individual); b) related to the influence of the members with *extreme ratings* in interests; c) according to the *degree of variance*, or homogeneity, within the group.

Better analyzing the latter approach, the processes and the performance of the group are affected by its members' *personality homogeneity/heterogeneity*, rather than by the average tendencies. It is relevant to note that *similarity* is the extent to which an individual's values, beliefs, attributes and other characteristics match with those of other group members or of the one embodying all the characteristics considered appropriate by the social category (ie. prototype) (Leonardelli, Picket, & Brewer, 2010). Group dynamics are impacted by group's variance according to *two different perspectives*. While the approach of "*Opposites are Beneficial*" will be better explained when discussing divergence processes resulting in poly-focal TEP, the most common is known as the "*Bird of a Feather Flock Together*".

This claims that affective similarity among group members increases attraction, as individuals prefer to enter groups of people similar to them, who closely match attitudes, values, interests and personality (Barsade & Gibson, 1998; 2012). In fact, George (1990) reviews the *Attraction-Similarity-Attrition framework*, developed by Schneider in 1987, to understand why and how organizations use corporate values in order to attract, select and retain individuals sharing the same personal values. This theory claims that individuals with values and personalities similar to the organization's ones tend to be attracted, selected and retained by it, as they are likely to become more similar over time, consolidating the organizational culture. In fact, *attraction* is determined by *similarity in personality*. In turn, individuals aim at being hired by business ventures who share similar values or other attributes and, when not feeling comfortable, they may choose to exit the group. By consequence, the remaining group members become more similar among each other (George, 1990).

Affective group composition results from individuals sharing their personal feelings, moods and emotions, enabling the development of a group affective tone. This consists of similar and coherent behaviors and reactions within a group. Thus, high cohesion is generally experienced by homogeneous groups because of the high level of similarity. In turn, they are better able to lead individual's conformity to collective norms, they are more likely to exclude a member with divergent opinions and they tend to experience feelings of joy and satisfaction rather than stress (Kelly & Barsade, 2001).

The *nature of the group affective tone* is likely to be determined mainly by each individual's personality disposition to experience *positive (PA) and negative (NA) emotional states*. Positive individuals tend to be more cheerful, to have a sense of well-being, to have a self-view as effective and enjoyable, to experience positive feelings of enthusiasm, energy and determination, contributing to develop cohesion, optimism, group-think and joy in homogeneous positive groups. Conversely, individuals characterized by a high disposition towards negative feelings tend to experience irritability, tension, anxiety, worry, upset, sluggishness and distress. An homogeneous group with all pessimistic individuals tend to experience low or absent productivity, non-realistic caution and apathy (George, 1990; Barsade & Gibson, 1998).

Passion, which is a form of affect, is used by people to judge the perceived similarity among group members.

People consciously and unconsciously are attracted by people with similar attitudes and values, mainly in relation to positive affect, as affective similarity is felt by individuals as a confirmation of their feelings being appropriate. By consequence, people reinforce their affective state; this results in an increased attraction among members of the same group (Barsade, Ward, Turner, & Sonnenfeld, 2000). The resulting *homogeneuous group* tends to experience feelings of liking and comfort among each member, leading to a strong social integration and cohesion, to greater cooperation and trust, to stronger social penalties when group norms and values are not respected. This in turn may result in better intergroup processes, in stronger learning, in more effective decision-making, in a stronger efficiency in task performance, in higher adaptability and dynamism, in improved outcomes and in lower group turnovers and conflicts (Barsade & Gibson, 1998; Barsade, et al., 2000).

As similar people are expected to work in the *same group because of attraction*, they should *behave in similar ways*. In fact, homogeneous groups usually experience similar display tendencies and facial and body expressions, in order to absorbe group-level emotions, in order to congruently express their feelings (Barsade & Gibson, 1998). *Positive homogeneous groups* are generally characterized by an engaging work environment, by an easy arousal of positive behaviors, by citizenship behaviors and by lower absenteeism and turnover within the group. Conversely, *homogeneous groups with a prevalent negative affective tone* form an unpleasant work environment, where absenteeism and turnover is a common trend and prosocial behaviors are unlikely (George, 1990).

A distinction between *actual similarity* and perceived similarity must be done. The former refers to individuals sharing attributes, interests and values. It can be measured by externally comparing people's personalities with standard personality traits. Conversely, *perceived similarity* is related to the belief of an individual of being similar to others (see Cardon, Sudek, & Mitteness, 2009). Perceived similarity is found to be the driver for the similarity-attraction process. If team members perceive to have a similar passion focus and intensity, the similarity-attraction process is activated, feeling more comfortable among each other and interacting among each other (Cardon, et al., 2016).

Affective transfer processes

Affective transfer processes are referred to as *emotional contagion, vicarious effect, behavioral entrainment* and *interaction synchrony*. As these tend to influence the development of group affect, they are assumed to drive the formation of a mono-focal TEP (Cardon, et al., 2016). Kelly and Barsade (2001) have developed a model (Figure 2.2) to better understand the implicit and explicit processes leading individual-level affect to spread across other team members and to combine in a group emotion. The model also considers the affective and nonaffective context, influencing the final output.

According to the model, as presented in the Figure above (Figure 2.2), *individual-level affect*, intended as the combination of subjective moods, emotions, sentiments and emotional intelligence, represents the input to be transferred to other group members through bottom-up and top-down processes, referred respectively to *affective compositional effects* and *affective context*. Affective sharing arises from *explicit and implicit processes*. The final output is the *group emotion* resulting from the combination of individual affective states and their impact on group dynamics. Moreover, the collective construct impacts on the individual-level moods and emotions and on related processes. In the following subparagraphs, concepts introduced by the mode (Figure 2.2) are better explained.

Nonaffective Nonaffective Nonaffective Context Processes Outcomes Affective Context Sharing moods and emotions: Explicit processes Affective Individual level Group Compositiona moods and Emotion **Effects** emotions Sharing moods and emotions: Implicit processes

Figure 2.2: Moods and emotions in small groups and work teams

Source: Kelly & Barsade, 2001

Explicit and conscious processes involve group members actively trying to influence both the group emotions and the members' individual emotions. These processes may be identified in two subgroups: a) intentional affective induction and affective influence processes; b) affective impression management.

The former subgroup processes are likely to occur as individuals can intentionally try to manipulate affect in order to influence the group. Despite the stronger influence of team leaders on other members' affective state through the use of emotions, each individual, mainly influential ones, can intentionally behave in a certain way to drive the group towards a specific direction and goal alignment. A powerful tool for inducing and influencing group affect is *charisma*, the personal magnetism of an individual to attract and lead people. This characteristic emphasizes the members' positive feelings and decreases the impact of negative emotions. Emotion induction and influence can also arise from *non-interpersonal stimuli*, such as music, rewards, movies or gifts. However, these tend to have a lower reinforcing and reciprocal effect on affect.

Affective impression management, which is an additional type of explicit process occurring in groups, mainly entrepreneurial teams. Individuals display surface-level emotions in order to suggest others the experience of an appropriate affective state in the specific context. This process tends to be relevant for group emotion because individuals observe other members as searching a reassurance on the appropriate behavior to be carried out in a certain situation, in order to regulate their expressions of affect

accordingly, to better fit within the group. Affective feelings that arise from these processes represent an *external display to gain rewards*, rather than being real. An example of *intentional mimic of the affect* shown by another individuals is provided by people joining other group members in smiling and being enthusiastic about a certain circumstance, even if not feeling so. The several *logics* behind the intentional affective impression management could be summarized in each individual's need to integrate in the group and to be positively perceived by it. Corporations tend to foster this process as it may encourage employees to develop and share common surface-level emotional displays, in order to enhance goal alignment. It is noticeable that mainly cohesive groups experience such process, as they are characterized by norms for shared emotional display rules. Moreover, affective impression management may partially explain the groupthink phenomenon (Kelly & Barsade, 2001). This occurs when group members perform irrational or dysfunctional decision-making processes, by actively neglecting different perspectives and by avoiding interactions with the external environment, in order to achieve group harmony and conformity (Janis, 1971).

Conversely, *implicit and subconscious processes* may occur with individuals ignoring the occurrence of emotional sharing. These processes include: a) *emotional contagion*; b) *behavioral entrainment*; c) *vicarious learning*.

Emotional contagion is defined as the process in which a person or a group tends to influence emotions and behaviors of another person (Barsade, 2000). It is most likely to occur when individuals automatically mimic and regulate their facial expressions, voice, posture and movements according to those of other group members, in order to have an emotional state consistent with the group's one (Kelly & Barsade, 2001). In fact, emotional contagion mechanisms have been identified in emotional mimicry and synchrony of others. The resulting facial, vocal, postural feedbacks impact on the individual's emotional experience, as group members tend to conform to others' emotions (Hatfield, Cacioppo, & Rapson, 1994). This process consists of *affect sharing* among people within a group, as individuals who enter a group are exposed to other member's affective states, characterized by differences in terms of emotional enjoyment (positive and negative) and of energy level, intended as the intensity in communicating emotions to others. Emotional contagion is more likely to occur when higher attention is on the emotional communication among group members (Barsade, 2000). Additionally, this process can differ according to the different abilities of senders and receivers of emotions. In fact, affect and similarity-attraction is enhanced by having influential group members who are good emotion sender or receivers. This explains the differences in the contagion process. While similarity in the experience of positive feelings foster greater contagion, negative affective states can be more easily transferred than positive ones (Barsade, 2000; Kelly & Barsade, 2001). Emotional contagion can be measured by observing group members' facial expressions, body language and verbal tones and their mimicry of those associated to others' passion (Barsade, 2000), as different emotions are associated to different facial muscle movements (Doherty, 1997) .Emotional contagion can be measured following a model

based on 5 elements: a) sender emotion intensity, b) receiver emotion intensity, c) sender's ability to display emotions; d) receiver's receptiveness; e) the channel's force in connecting the receiver and the sender of the emotion (Tsai, Bowring, Marsella, & Tambe, 2013). Emotional contagion can be considered as a source of information about the group's performance, its cohesion and its survival. For example, smiles are associated to acceptance, while fearful facial expressions represent a signal of danger for other group members. Additionally, emotional contagion is useful to fill the group with positive or negative feelings, affecting behaviors and attitudes. This process is highly relevant in the entrepreneurial context, where contagion occurs to all stakeholders, mainly employees (Cardon, 2008). Two main sequential processes lead to emotional contagion: an unconscious, automatic, spontaneous and simultaneous nonverbal primitive mimic process involving facial expressions, body language, tone and speech first, and a conscious social comparison at affect-level then. In the specific entrepreneurial context, employees tend to unconsciously mimic the entrepreneur's facial expression or movement when performing a passionate activity. This could lead employees to develop an actual passion for the same role, if the behavior is internalized. Additionally, employees tend to compare with other colleagues emotions only when experiencing a situation similar as the others'. Individual feelings are usually included in a collective one, as the in-group diversity and consequent heterogeneity should be reduced because of the overpowering group emotion's force (Barsade & Gibson, 1998). When individuals identify in a similar situation of others and they feel an identity connection with the observed person, information on emotions and behaviors experienced are used in that context to understand which is the most suitable way of feeling (Barsade, 2000; Cardon, 2008). The contagion of positive emotions strongly influence internal team dynamics, as it enhances cooperation, reduces the conflict rate and improves performance effectiveness perception (Barsade, 2000). In turn, emotional contagion facilitates convergence of affect within teams, and in our specific case of passion (Cardon, et al., 2016).

Vicarious affective learning consists of the acquisition of knowledge of and the sharing of others' emotions by observing them while experiencing a certain feeling. This type of observational learning occurs when the emotional external-level display or the related behavior have been identified by the individual and internalized. Vicarious learning is a social modeling process for emotional and cognitions reactions, referred to as socialization. It is relevant to highlight that affective feelings arising by vicariously experiencing others' emotions are real. A different type of vicarious affect is empathy, intended as the ability of individuals to understand and share others' experiences and emotions by adopting their frame of reference (Barsade, 2000). Together with trust, this is the outcome of activities performed focusing on group well-being (McGrath, 1991). Vicarious learning tends to have long-lasting effects (Barsade, 2000). In general, this process affects many organizational aspects and, in the specific context of entrepreneurial passion, elements such as employee commitment are influenced. In fact, by actively involving workers in the decisional process, entrepreneurs make them experience the positive feelings associated to their passion for a certain role identity, they drive employees towards the entrepreneur's perspective and concordant behaviors are affectively enacted (Breugst, Domurath,

Patzelt, & Klaukien, 2012). Vicarious learning is found to enhance the *passion convergence process* in the specific situation when new venture team members feel animated while observing others' passion-related behaviors, because of a deep identity connection (Cardon, 2008) and attempt to internalize the same ones, in order to behave in a way considered as suitable (Cardon, Post, & Forster, 2016).

The occurrence of passion convergence toward a mono-focal TEP with similar focus and intensity is facilitated by *behavioral entrainment processes* leading to *interaction synchrony*. These unconsciously occur when an individual synchronize with others' emotional behaviors by modifying or adjusting his/hers. *Coordination* involves body movements, body postures, emotions and attitudes of group members. This behavioral synchronization occurs *when interactions take place*, through mimicking others' movements and simultaneously coordinating speech and movements. The final outcome of these processes is an *improved in-group interaction*, which in turn leads to positive affect. When behavioral entrainment or interaction synchrony are lacking, unpleasant outcomes arise. The enactment of such processes when performing entrepreneurial activities, for example when presenting the business idea to potential investors, tend to *enhance the feeling and the perception of collective shared passion* among team members (Barsade, 2000; Cardon, et al., 2016).

To understand the individual-level affect, the affective sharing processes and their resulting outcomes both *affective and non-affective context*, composed by respectively emotional norms and external events, should be considered (Kelly & Barsade, 2001). The comprehension of the context-related and cultural conditions of the entrepreneurial venture in the past, nowadays and in the future is extremely relevant to fully master the business growth path and the development dynamics (Cardon, et al., 2005).

The experience of individual passion may be enhanced or limited by the *affective context*, which involves the formation of *three types of in-group norms*: a) organizational emotion norms, b) local group norms and c) group emotional history. These develop *display rules*, related to social expectations on the expression of the feelings, and *feeling rules*, norming what emotional experience is considered appropriate in a particular environment.

Organizational emotion norms are rules related to the appropriate emotional experience in the context in which the group is, also driving the affective expression. These can form for any interactive business role, both explicitly and implicitly, enhancing coordination, harmonious team environment and group performance. These formal and informal rules are shared among group members through socialization and inclusion, through observations of role models or through a learning processes.

In addition to or instead of the previous one, *local group norms* may be created. These are the distinctive rules for emotional expression, developed according to the group's interaction history. The existence and the salience of these norms for in-group emotional experience is affected by the stage of development of the group; moreover, during business transition phases, local norms tend to change.

The formation of norms driving emotions displays and related behaviors is affected by all the previous affective experiences of each group member, identified as the *group emotional history*, which in turn affect the future emotional expression expectations. In fact, emotions tend to self-reinforce (Kelly & Barsade, 2001).

Affective processes are impacted also by *non-affective variables* such as social and physical characteristics of the external environment, in addition to *external events* (Kroezen & Heugens, 2012). These are identified in: a) the *intergroup context*, b) the *physical environment*; c) the *technological conditions*. The former refers to the relationship of the group with the external environment and with other groups. This element may foster the emergence of competition and negative emotions between groups, thus on the in-group affective experience. The physical layout of the environment in which the group is embedded has a strong influence on the quality of the emotional experience. In fact, noisy, uncomfortable and close locations enhance the emergence of negative feelings. Conversely, open-space, cool and friendly environments are the features driving positive affect. Nowadays, technological innovation has a strong relevance on group dynamics and performance. In fact, there is an increasing trend of *computer-mediated groups*, working remotely, which lack of face-to-face in-group interactions and, thus, of nonverbal, implicit emotional expressions. This may negatively impact on the emotional experience of the group, as affective sharing processes strongly depend on the mimic or conformity to nonverbal emotional displays (Kelly & Barsade, 2001).

Identity emergence through imprinting, enactment and conformity processes

The most relevant, continuing and distinctive goals, beliefs, traits and abilities of an organization form the organizational identity, which represents the combination of both shared understandings and institutionalized identity claims. This construct tends to be observed throughout the organization (Kroezen & Heugens, 2012). Individuals have a need for a clear "self" and for acting accordingly to it. Therefore, the definition of "who we are as an organization and who we can be as individuals, organizations and societies" requires three identity-related features: a) core, b) enduring; c) distinctive (Gioia, Patvardhan, Hamilton, & Corley, 2013). The formation of a new identity is the result of a sequential collective sense-making and sense-giving processes performed by in-group members, under the influence of the external environment and unfolding over time (Gioia, et al., 2010). In fact, external events are found to have an impact on the organization identity, as previously explained (Kelly & Barsade, 2001; Kroezen & Heugens, 2012). The collective identity aims at obtaining legitimacy by stakeholders, through the mimicking of others behaviors, and at developing distinctive organizational features, by enabling the business venture to survive and to respond to the environmental dynamics (Kroezen & Heugens, 2012). The concept of identity can be divided into two interrelated elements: a) the enacted organizational identity; b) the identity reservoir. The former term refers to the organizational core attributes, referred to as institutional claims, which tend to vary over time and which depend on the type of social interaction to be faced. The specific set of attributes used to prove the claims we mentioned earlier are defined as *proto-identity attributes*. These, combined with the organization's principles and both formal and informal organizational practices, form the *identity reservoir* (Kroezen & Heugens, 2012). By consequence, identity emergence of a new business venture is the result of a *two-step process*: *identity imprinting* first, and *identity enactment and convergence* then. The first step consists in building the identity reservoir by merging each team member's proto-identity set, flowing in the team. The following step is the process related to the selection of identity claims, to the implementation of the collective identity reservoir and to the start of sense-making and sense-giving process, both within and outside the business venture.

In organizational contexts in which identity values are multiple, and sometimes contrasting, *conflicts* and dis-identification among the venture's members are more likely to arise. However, an empirical research on how collective identity forms in a context with divergent values shows that in such context the implementation of the three identification management practices fosters organizational identification of members. These are: a) integrative solutions; b) elimination of previous inviolable value ideologies to create an inclusive and open organizational context; c) introduction of identity principles in routine procedures (Besharov, 2014). When the NVTs members have similar entrepreneurial passion role identities, the identity reservoir at collective-level will have low focus variety, thus its enactment routines will develop more quickly. This process accelerates and facilitates the formation of mono-focal TEP (Cardon, Post, & Forster, 2016).

In addition to identity imprinting and enactment, the convergence process to Team Entrepreneurial Passion, most likely mono-focal, is powered by *social conformity processes*, especially when members experience moderate levels of focus and intensity diversity. The formation of a collective identity is mainly influenced by *identity inconsistencies* and *external networks*. The latter are contexts where social relationships develop and evolve, which are considered to be a motive for actors of the society to change the identity. The network conditions enhance social conformity, which leads to homogeneity within the group. Thus, in a situation of similarity among individual members, *collective identity reinforcement* is a likeable consequence (McFarland & Pals, 2005). Individuals tend to *conform to group pressure* in terms of cognition, attitudes and behavior with other group members, as they identify with a collective entity of individuals experiencing low diversity among each other and they aim at avoiding to be excluded. In such contexts, individuals are expected to perform activities being driven by principles recognized at group-level. *Moral identity* leads people to behave in a sincere, kind, sympathetic way, which should be defined as appropriate by the other group members and by the society. By consequence, individuals tend to continously look for identity changes in moral action to conform to the group's identity (Carter, 2013).

The analyzed emergence processes lead the authors of the TEP model to claim that NVTs with low focus variety and low intensity separation will more likely develop a mono-focal collective entrepreneurial passion.

In the case of *low team diversity in terms of identity role focus* but experiencing *different intensity* passion levels among team members, mono-focal TEP will arise, even if more slowly. The differents paces in collective passion formation are consequence of affective and identity processes taking longer to produce effects and resulting in the creation of a TEP (Cardon, Post, & Forster, 2016).

Perceived complementarity

A different type of passion is proposed to emerge when individuals of a NVT are passionate about different identity role (*high focus variety*), even if they are experiencing similar level of passion intensity (*low intensity separation*). This context leads to the formation of a *poly-focal Team Entrepreneurial Passion*, as team members agree being collectively passionate about more than one identity role-related activities with a similar intensity. As previously mentioned, *similarity-attraction* is enacted also *in the case of heterogeneous groups*.

Collective emotions, and specifically entrepreneurial passion at team-level, are likely to develop when passion foci are perceived as complementary among other team members' ones. In fact, individuals are able to nurture their passion-related identity role in an intense way, while other members concentrate their effort on activities related to other passion focus (Cardon, et al., 2016). Complementarity occurs when individual specific traites are opposite one another, while completing the other members in a friendly way. According to the Needs Complementarity Theory, attraction among individuals is determined by complementary among needs, which frequently arises when individuals relate to who has useful differences in terms of values, personality traits and attributes (see Schutz, 1958 in Barsade&Gibson, 1998). In fact, the attraction process is driven by the contribution each member can do for the others (see Gross, 1956 in Barsade & Gibson, 1998). By consequence, the matching together and the mutual support of personality traits, values, beliefs and behaviors between members of the same group defines the concept of complementarity (see Schutz, 1958 in O'Connor & Dyce, 1997). Heterogeneous groups members are attracted by individuals complementary from them as they provide constructive criticism and complete their set of personality traits and skills, while they often reduce the dysfunctional impact of groupthink. Group heterogeneity, rather than homogeneity, tend to lead to positive results (Cardon, et al., 2016).

Resuming the previous discussion on similarity-attraction and complementarity processes, the other perspective on affective team composition and group variance is worth to be better explained, which is based on "Opposite Being Beneficial" (Barsade & Gibson, 1998). It enhances the positive impact of affective heterogeneity arising from having members with different focus and intensity in their emotional experience. However, this is possible only if all members accept the differences in terms of moods, acute emotions and dispositional affect, while being aware of the other individuals' different but mutually reliant performance of their affective identity role. Groups whose member have different values or personalities tend to perform more emotional checks, to find an emotional balance, to enhance creativity

and, indirectly, obtain *better outcomes* (Barsade & Gibson, 1998). However, in this type of groups, positive performance results are more likely to occur when differences among in-group individuals are strong and interpersonal rigidity is present (O'Connor & Dyce, 1997). Moreover, heterogeneous groups, specifically those with a *low personality disposition to experience positive affect* (PA), tend to undergo emotional and task conflicts and low cooperation because of strong in-group diversity (Barsade&Gibson, 1998). This results in lower corporate financial performance (Barsade, Ward, Turner and Sonnenfeld, 2000).

According to affective and identity processes involved in the emergence of a shared collective passion, it is proposed that NVTs of individuals diverse in entrepreneurial passion focus (*high focus variety*), while being passionate at the same high extent for the preferred identity role (*low intesity separation*), will put into action divergence processes, resulting in the development of a *poly-focal TEP*.

In a context of divergences among affective dimensions, the team's decision-making processes tend to balance the coexistence of divergent passionate role identities, by accepting and enhancing each member's different entrepreneurial passion foci, despite the natural pressure leading to conforming on a unique mono-focal TEP (Cardon, et al., 2016).

In situations of extreme dissimilarity among team members, conflicts are likely to arise, as each individual becomes rigid in safeguarding its personal identity. According to the Optimal Distinctiveness Theory (see Brewer, 1991 in Leonardelli, Picket, & Brewer, 2010), people manage their social relationships driven by two independent and opposing needs: a) the desire for being assimilated and included in social groups (i.e. assimilation need); b) the need to have an unique self-identity compared to others (i.e. differentiation need). In order to satisfy both needs simultaneously, individuals tend to identify the balance in distinctive groups, which are both moderately inclusive and differentiated, with a strong preference for numerical minority groups. In fact relatively small size social groups meet more easily the need for inclusion and for being different of individuals, compared to larger ones. The satisfaction of both needs can occur by *individual self change* to be closer to the in-group identity or by the modification of the general perceptions of the group itself and its relation with the environment. Individuals experiencing a strong group identification may adjust their self-identity to be more included with the group, while members who feel highly different from the group tend to not deviate from their self-identity (Leonardelli, et al., 2010). By consequence, extremely high discrepancy within group members is the fertile ground for *conflicts* to rise, thus reducing the probability of the development of a shared identity (Cardon, et al., 2016). Individuals who have different focus and intensity in entrepreneurial passion may regardless form a new venture team, in order to pursue entrepreneurial goals. However, team-level entrepreneurial passion will not probably form when there is a strong diversity in both focus and intensity, even if the members are passionate for a specific entrepreneurial identity role (Cardon, et al., 2016).

To summarize, according the different levels of intensity separation and focus variety, different types of Team Entrepreneurial Passion are likely to form. The outcomes of Bottom-Up processes can be synthethized in the following table:

Table 1.1: Team Entrepreneurial Passion (TEP) emergence

	Low Focus Variety		High Focus Variety
Low Intensity Separation	Mono-focal TEP		Poly-focal TEP
High Intensity Separation	Mono-focal	TEP(slower	Unlikely / No TEP formation
	formation process)		

Source: own elaboration

v) The model dynamics: Top-down Influence processes

Team Entrepreneurial passion has *direct and indirect effects* on both the *team quality and performance* and on the *NVT member's outcomes*, which consist of the Individual Entrepreneurial Passion and his/her choice to enter or to exit the team. Over time, this shared emotion modifies the team passion diversity, by influencing each individual's affective status and impacting on the individual and the team's outcomes.

Individual outcomes

TEP is strongly related to *group affective dynamics*. In fact, it is an emotion-related construct involving group-level identity and dynamics, enhancing and changing the structure of the emotional identity of individuals, which in turn have an impact on their individual's focus and intensity of entrepreneurial passion, thus on Team Passion Diversity (Barsade & Gibson, 2012). There is a strong evidence that, despite external events, individual members are influenced by the others' moods, which form the collective one, and in turn impact on the team's behaviors, perceptions and performance (Totterdell, 2000). Team Entrepreneurial Passion can be associated to the *emotional culture of an organization*, representing "the values, the norms, the artifacts and the underlying assumptions which have an emotional content" (Barsade & O'Neill, 2014, pg. 583), providing a guideline to team members of the passion intensity and the related behaviors considered appropriate according to the shared collective identity (Cardon, et al., 2016).

Identity processes have a strong influence on individual members, which have to face *the social identity demand pressure*. As described earlier, individuals have to cope with the two opposing needs of inclusion and distinctiveness, which affect their group perception, social cognition and the intergroup behavior. The extent to which individual members modify their individual passion, in terms of focus and intensity, strongly depends on how close they feel to the group identity and to the relative importance given to one need with respect to the others (Leonardelli, Picket, & Brewer, 2010).

TEP is also found to influence team members' *individual choices of entry and exit* from the team. These outcomes, in turn, directly affect the NVT Passion Diversity.

Individuals may *exit* the team when differences between their self-identity and the shared collective one are not remediable. In fact, according to a study on dirty work (Ashforth, Kreiner & Clark, 2007), the *non-identification with a role or an occupation* lead people to distance themselves from it, by using different techniques such as making joke of the role, not putting emotional effort in performance or to the most extreme team exit. Dis-identification from an identity role protects the person's self from being influenced by group affective dynamics. Conversely, *individuals clearly identifying with a role* implement distancing techniques in a reactive way, in order to face esteem perceptual threats arising from the external environment. As explained when discussing the similarity-attraction process, team members with a low extent of affective characteristics matching to others tend to exit the group, as there is a missing alignment on identities (see Schneider, 1987 in George, 1990).

Top-down processes boost the so called *Positive Group Affect Spiral* in an intentional and careful way (Walter & Bruch, 2008). This dynamic model better explains the emergence of affective similarity among team members. Group affective similarity is related to relationships occuring within the group through a self-reinforcing loop, which increases similarity among group members and the quality of the relationships among them while being in a dynamic context. By consequence, similarity-attraction processes in the affective elements are reinforced by relationships among team members through sharing processes of emotional contagion, emotional comparison and empathy, which lead to a grouplevel affective convergence. However, such dynamics occur specifically when in-group relationships are extremely positive. Conversely, if they are low-quality, individuals tend to moderate their affective external expressions, decreasing considerably the probabilities of affective convergence. The external context, as previously detailed, impacts on the emergence of positive group affect, by influencing affective sharing and similarity-attraction mechanisms. The factors with stronger effects, both positive and negative, on the functioning of the self-reinforcing model are charismatic leadership, cynism of individuals or subgroups, the presence of emotional norms at group and organizational level and the organizational identity (Walter & Bruch, 2008). The situations negatively impacting on the development of the self-reinforcing process of positive affect emergence may result in the exit of members feeling dissimilar from the NVT, which in turn are consequence of the similarity-attraction processes.

As the NVT develops and grow in size, the entry and the exit of individuals from it may occur because of *entrepreneurial decisions*, related to the strategy or to relationships with stakeholders and because of *personal reasons* or conflicts with other team members. For example, a new venture team entering a new development phase may lack strategic skills, which are introduced with the entrance of new members in the team. Conversely, skills becoming less critical may in turn result in the dismission of the resource, accomplished through the exit of the team member.

A NVT turnover is strongly dependent on other factors such as (Chandler, Honig, & Wiklund, 2005):

o the *dynamism of the environment*, requiring members with an ability to continuously adapt and react to changes;

- o the *stage of the organization in temporal life cycle*, as problems to be faced change at different growth levels, thus impacting on required skills, priorities and organizational settings. Low growth rates lead to an increase of members' departure (Boeker & Karichalil, 2002);
- the *team size*, which is related also to the satisfaction of inclusion and differentiating needs (Leonardelli, et al., 2010). At the initial stage, entries and exits are not related to the team size. However, as the team size increases, exit rates are likely to increase because conflicts tend to emerge, team building is more complex and cohesion is reduced. Entry rates are not affected by the team size (Boeker & Karichalil, 2002; Chandler, et al., 2005).
- o the *variety in the professional background of the members*, as different perspectives and heterogeneous affective identities often lead to conflicts, thus negatively impacting on the group inclusion, on communication and cohesion.

NVT exit pressures are reduced by the *active involvement* of founders and team members in management and strategic decisions and by individual *job roles* and specific responsibilities. However, founders are more likely to exit when, during high growth stages, they realize their personal lack of the new skills and competencies are required (Boeker & Karichalil, 2002). Despite the reason leading to exit, team members leaving an NVT have a *negative impact* on both individual and organizational performance. In fact, in addition to economic costs of recruiting and hiring new resources to substitute the one leaving, individuals' exits involve the departure of specific know-how, which may have not been internalized at organizational level yet (Chandler, et al., 2005).

Two different explanations are currently provided by literature for adding new members in the team (group entry). The economic and rational reason is related to the addition of critical resources, which are strategically needed by the team to grow the business venture. Conversely, the social perspective sustsains that hiring decisions are based on relationships, trust and similarity-attraction elements. Focusing on the latter, human resource management processes based on interpersonal attraction is the result of the team's need to preserve the organizational culture, to proceed smoothly in following the founders' view and to avoid emotional threats to the venture (Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006). However, challenges arise from the introduction of new members in NVTs. In fact, at the first stages of development teams tend to operate avoiding formal procedures and set of rules, preferring to maintain an informal structure in order to adapt to the environment dynamics. The entry of new members may change the in-group equilibriums (Chandler, et al., 2005) or may affect the performance of in-group processes. The addition of human resources to an exsisting team can have both a positive and negative impact on it, as it can improve creative problem-solving skills or increase emotional conflitcts (Forbes, et al., 2006). For this reason, an effective addition of individuals to a team requires socialization and inclusion processes, together with adaptation and acceptance of the consequent changes, in a timely and patient manner. Moreover, to drive behaviors and decision-making in an effective way, it is important to clearly illustrate goal expectations in assigned roles and to give an

overview of the implicit and explicit organizational and local cultural norms, to both new and existing team members (Chandler, et al., 2005).

The *composition of NVTs changes over time*, in response to ennvironmental changes and to adaption to the context. However, these modifications impact on the assets of the new venture, mainly intangible ones, and on its outcomes. The new venture team is also strongly affected by members' entries and exits. By consequence, TEP may change as the new team composition may lead to a different collective shared identity. Individuals could modify their entrepreneurial passion focus and diversity, impacting on passion diversity, because of variations in the composition of the team. To resume, *TEP influences the entry and the exit of members* from the New Venture Team; conversely, these individual outcomes have a *direct impact on team passion diversity* experienced by individuals (Cardon, et al., 2016).

Team outcomes

Team Entrepreneurial Passion *impacts on the quality and on performance of the NVT*, which in turn affects the business outcomes.

A shared entrepreneurial passion positively enhances the team's ability to effectively interact in the working environment, to share knowledge and information, to cooperate in the decision-making process, to improve in-group relationships by reducing conflicts, and to reinforce the team learning process. These effects in turn lead to a stronger team inclusiveness and cohesion. Moreover, behaviors become aligned, communication is simplified and quickened.

The quality of the team can be measured along two main dimensions: a) cohesion; b) conflict.

The average composition of teams determines the formation of *group cohesion*, as members may develop strong links among each other and with the group as a whole (Kelly & Barsade, 2001). It is a process of self-categorization, which results in in-group attraction and differentiation from other groups, stereotypic perception and positive disposition towards other members (Hogg & Hains, 1998). The *cohesiveness degree* is determined by: a) the level of similarity among team members; b) the group size; c) the easiness to be included in the group; d) the collective success and performance; e) external events and threats (Drnovsek, Cardon, & Murnieks, 2009).

The quality of processes and the performance of teams is strongly impacted by *team conflicts*, which usually occur because of contrasting interests, actions, personality traits, values and beliefs. Typically, three types of team conflicts can be identified, which can be grouped in two groups. Cognitive conflicts, so-called because of the involvement of rational discussions to reach a solution, are task conflict and process conflict. The former is related to misalignements on task performance or activity content. The latter is due to disagreements on the task approach of the team. Cognitive conflicts are considered to have a positive impact on team performance, because the adoption of different perspective improves the decision-making process. Conversely, Affective conflicts, also referred to as relationship conflicts, are the most challenging for the team, and they are likely to represent a threat for it, leading to in-group anxiety, lack of cooperation and communication, wrong focus of energy expenditure. Moreover, relationship conflicts may also generate cognitive disagreements. In fact, they involve incompatibilities

among emotional experience and expression of group members, which is the fertile ground for the generation of negative affect, such as hostility and anger. This most challenging disagreements are process conflicts and relationship conflicts. (Drnovsek, Cardon, & Murnieks, 2009).

Sharing a collective identity leads individuals to be more motivated towards collective goals achievement and harmonious team environment maintenance. Even if TEP has a *positive influence on the team's quality*, this is *partially offset* by groupthink development, by difficulties in maintaining team harmony when individuals have divergent views or they are rigid on their positions (Cardon, Post, & Forster, 2016).

Positive effects on the team performance are provided by shared positive affect. In fact, team entrepreneurial *passion presence* motivates team members to set and pursue challenging goals in a focused way; it increases the team's responsiveness to the dynamic environment; it leads to stronger alignment on performance of activities, resulting in better team and organizational performance. Conversely, the *absence* of team entrepreneurial passion may have negative effects on business venture outcomes, such as profitability, sales and growth, because of arising affective conflicts (Cardon, et al., 2016).

Team oucomes may have an *impact on passion diversity*, as a consequence of their impact on individual outcomes. In fact, a shared collective affect enhances the comparison among the emotions, thus passion, experienced by each individual and those usually expressed by the society. Moreover, highly cohesive and integrated teams improve in-group communication, emotional contagion and vicarious learning processes. *These identity and affective processes directly impact* on the individual's feelings and behaviors and on the exit decisions.

The achievements and the challenges occuring during the life time of the business venture and of its team, together with the effort experienced by the team, lead to changes of entrepreneurial passion at individual-level. In fact, the experience of positive feelings enhances the *entrepreneur's persistence* in sustaining entrepreneurial action (Cardon & Kirk, 2013). Positive affective events, such as the launch of the Beta product or the external interest of potential investors, enhance the individual entrepreneurial passion for a specific role, thus increasing the effort and the motivation on pursuing business-related activities, leading to a self-reinforcing cycle. Negative affect events are likely to have a stronger impact on individual outcomes. By consequence, *the team-level outcomes* in terms of quality and performance have a *direct impact on individual outcomes* and related behaviors and, in turn, each member's entrepreneurial passion contributes to shape TEP through the *effect on NVT passion diversity* (Cardon, et al., 2016).

vi) The relevance of the venture stage

The relevance of bottom-up emergence and top-down influence processes depends on the life cycle stage of the business venture. *From start-up to early growth stages* affective and identity processes

related to the *emergence of TEP* are likely to be more impactful, as individuals have relevant self-identities compared to the collective ones. *At the later stages of* the business life-cycle, TEP has already developed, *top-down influence processes* tend to become more relevant, as group processes have been internalized by team members and a shared affective culture is institutionalized, leading members to adapt to the collective identity and reducing their influence on TEP changes (Cardon, et al., 2016).

2.5 Conclusions

In the present chapter, a broad overview on affective concepts has been provided, in order to enable the reader to understand more the following discussion of emotional aspects involved in entrepreneurship (Vallerand et al., 2003). This review of social literature is useful also because it represents the starting point of all following studies on entrepreneurial passion. Entrepreneurial passion has recently become a hot topic, especially because of its relevance in driving entrepreneurial effort and external investors' decisions. Entrepreneurial passion has been been defined as the "consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon, Wincent, Singh, & Drnovsek, 2009). It is characterized by two main elements: an intense positive feeling and an identity-related focus of passion, which is related to business opportunities, tasks or activities. Entrepreneurial passion is the "love for work" related to affective feelings such as enthusiasm, desire or motivation. The most relevant effects of entrepreneurial passion are the strong motivation to overcome challenges and succeed, the desire to motivate team members to achieve ambitious goals, the engagement to the business venture and the high-intensity effort in carrying out entrepreneurial activities related to the domain an individual is passionate for. Three main entrepreneurial roles have been found to be central to the individual's identity. These are: passion for inventing, connected to the search, the recognition or the invention of new ideas or opportunities of product development; passion for founding, related to the individual being passionate about creating a business, about exploiting a business idea to become owner of a business; passion for developing, when the individual experiences positive feelings when growing and expanding the business, in order to reach success (Cardon, Wincent, Singh, & Drnovsek, 2009).

Entrepreneurial passion has been observed to positively impact on business performance, because it increases the level of effort and of commitment to the performing tasks and activities, leading individuals to work extra hours, while maintaining a high level of positive mood. However, if entrepreneurial passion reaches too high levels, it may lead the individual to be obsessed by performing the passionate activity. This in turn may result in a negative effect on business performance.

As entrepreneurial ventures are mainly made of teams, scholars have recently been considering entrepreneurial passion from a collective perspective, defining it as the combination of individual entrepreneurial passion experienced by entrepreneurial teams, including the differenced in intensity and focus (Drnovsek, Cardon, & Murnieks, 2009). A conceptual framework to observe the emergence and

the influence of Entrepreneurial Passion at team level has been developed by scholars (Cardon, Post, & Forster, 2016). This is focused on New Venture Teams, as defines Team Entrepreneurial Passion as "the level of shared intense positive feelings for a collective team identity that is high in identity-centrality for the new venture team" (Cardon, Post, & Forster, 2016). We have accept the authors suggestion for further research to empirically apply the model. Our choice is to analyze they dynamic part of the model, which includes bottom-up and top-down affective and identity processes. Thus, in this chapter we have integrated the literature discussed by the model's authors, by deeply analyzing the concepts referred by the authors. Moreover, we have integrated the model theoretical background also by integrating it with non-affective elements, such as physical environment, technology conditions and intergroup context, and with explicit affective sharing processes (paragraph 2.4.3).

CHAPTER 3

THE IMPACT OF TIME IN NEW VENTURE TEAMS

3.1 Introduction

Entrepreneurial teams represent a critical element for the business venture competitiveness and performance. Most of successful firms, especially small-medium ones, have been founded by teams rather than by solo-entrepreneurs. Academic literature has mainly focused on management-related topics of large corporations and existing firms, while teams of emerging businesses have received limited attention from researchers. Our intent with this chapter is to provide the reader with a thorough understanding of group development, of internal team dynamics, of moods and behaviours arising in it. Understanding teams is critical for organizations, especially for new ventures during the early stages of their business, when facing the highest degree of risk of failure. Thus, according to the importance of emerging businesses shown in Chapter 1, we consider relevant to acquire more knowledge on teams which drive startups. In order to acquire the necessary knowledge to interpret startups and the evolution of their Team Entrepreneurial Passion over time, we consider relevant to first clarify the differences among various definitions of teams and, then, to highlight the elements on which a new venture team, in particular a startup, is based on (paragraph 3.2).

Academic literature has not yet agreed in an unique definition of entrepreneurial team, because of different perspectives which may be adopted. We attempt to provide the reader with a clear definition, combining all most relevant elements characterizing both new venture teams and startups (chapter 3.2). Then our focus will shift to startup teams. Academic literature refers to these as the groups founding business ventures at an early stage, not taking into considerations all the elements included in the definition of startup of "high-growth and innovative organization, searching for a scalable and repeatable business model in an uncertain context" (Blank, 2010). We integrate current literature with discussions arising from experts of the startup environment, with a focus on the composition of founding teams, on the type and on the experiential background of startuppers. Recent literature has started to focus on observing entrepreneurial passion among different types of startups, distinguishing between high-tech and social entrepreneurs (Yitshaki & Kropp, 2016).

We then focus on understanding team formation and evolution. This is critical for our work, as we aim at integrating the Team Entrepreneurial Passion model with time, as an explicit element rather than as an factor embedded in the flow of group processes. Groups evolve over time and business-related tasks are strongly affected by the temporal element too. Team formation is a step-by-step process, characterized by different stages, as it is explained in paragraph 3.3.1. Thus we focus in analyzing

current literature's approaches to time in teams, in order to identify time-related elements affecting the velocity in team development, thus in TEP evolution (paragraph 3.3.2).

Business ventures, especially those dealing with extremely high uncertainty levels, are strongly affected by the founders' pressure towards ambitious and challenging goals' achievement in a short time frame. This leads to strong time pressure on team members. In paragraph 3.3.3 we aim to understand the effects of time pressure, the different perceptions of it and the influence of time perceptions on team internal dynamics. Every business venture is required to deal with temporary deadlines and to achieve milestones in order to grow. Schedules and temporary objectives are particularly relevant in startups, which require a clearly defined roadmap in order to be successful, because of the high risk involved and the scarce resources available. Paragraph 3.3.4 studies the impact of time deadlines on teams, on members' effort and, finally, on the overall team performance.

3.2 Entrepreneurial teams, New Venture Teams and startups

Venture creation is mainly a process involving *entrepreneurial teams rather than solo-entrepreneurs*. In such context, business performance is determined by *team's effective management*; thus, a successful process of team formation may increase success likeability of entrepreneurial ventures (Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006). Literature on entrepreneurial teams has mainly focused on large, existing firms, while little research has analyzed the new venture team's dynamics. By consequence, it is strongly suggested by scholars to improve the related understanding (Ucbazaran, Lockett, Wright, & Westhead, 2003).

3.2.1 Definitions and dimensions of entrepreneurial teams

Entrepreneurial teams (or founding team) have different definitions, depending on whether individuals with financial interests in the venture are considered or all those having an active role in the business. According to a summarizing approach, existing literature defines teams as characterized by three main elements: common goals, personal interdependence and professional complementarity. In general terms, a team is composed by two or more people, developing a social interaction in order to achieve common goals. Team members operate within an organizational system, which is related to and limited by the external environment. Thus, members are willing to perform critical tasks in an organized way, while mutually relying on each other in terms of goals, work progress and results. Each individual may have specific roles and responsibilities or he/she may be more generally involved throughout the team; however, each task is interconnected with others (Kozlowski & Ilgen, 2006, pg.79). In short, entrepreneurial teams are formed by members in charge of both management and ownership positions.

The first definition entrepreneurial team provided by literature, which is currently the most adopted one, focuses on new ventures. For this reason, the terms "new venture team" and "entrepreneurial team" are

used interchangeably. According to it, an new venture team is formed by *more than one individual* in the *pre-seed stage*, *sharing evenly a financial interest* on the business venture being created (Kamm, Shuman, Seeger, & Nurick, 1990).

This definition has been further developed by other authors adding to it the *direct influence on strategic decision-making* (for a complete review see Vanaelst, et al., 2006). However, this theorization has been criticized to be *partially inconsistent* with the empirical entrepreneurial environment on two dimensions: a) the equal sharing of financial interests should be substituted by a *more flexible approach*; b) it focuses on the creation of a team at the idea stage of the business venture, while teams can also *form or evolve afterwards* (Cooney, 2005; Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006).

3.2.2. New Venture Teams (NVTs)

A team is a group of individuals who aim at achieving shared goals. When focusing on newly created ventures at the early-stage, it is suitable to focus on management-related issues rather than financial considerations. An revised version of entrepreneurial team states that a New Venture Team (NVT), term that can be used interchangeably with "startup team" is referred to as a *group of carefully selected people* who are responsible for *strategic and operational business decisions* necessary when creating and growing a new business venture and who share a *common sense of commitment* to the achievement of entrepreneurial goals (see Drnovsek, Cardon, & Murnieks, 2009; Klotz, Hmieleski, Bradley, & Busenitz, 2014).

In conceptual terms, the definition of NVT is similar to that of Top Management Team (TMT). However, NVTs differ in terms of business roles leadership within the organization. While managers perform clearly assigned functional roles, members of a newly created venture tend to be in charge of the decision-making related to strategy and operations in broad terms involving the entire business, mainly because the early-stage organization lacks a defined distribution of leadership roles within the team (Klotz, Hmieleski, Bradley, & Busenitz, 2014). In more concrete terms, a NVT is the *group of founders, key employees and advisors putting effort in developing a firm, while starting from a business idea* (Barringer & Ireland, 2012), where membership is the result of strategic and managerial responsibilities in the new venture team.

The variety of definitions and the related confusion are the result of the static approach used by scholars when studying entrepreneurial teams of new ventures. While equity considerations and managerial roles are static elements at the founding time, future research is soliciting to focus on elements affecting the *evolution of entrepreneurial teams over time* (Vanaelst, et al., 2006). In fact, venture creation is a vibrating experience involving affective elements, other than rational aspects, which change over time (Morris, Kuratko, Schindehutte, & Spivak, 2012). A first attempt has been performed by Ucbazaran, Lockett, Wright, & Westhead (2003), who analyzed the factors affecting the entry and exit decisions and their effects on entrepreneurial teams, which will be better analyzed in the following paragraphs.

3.2.3. Startup teams

Startups are by definition New Ventures. The majority is *formed by teams* rather than single founders. In order to better analyze the internal dynamics occurring in startups, it is necessary to integrate academic definitions and theories with discussions of influential and expert people in the startup environment. Steve Blank has provided some definitions of the agents involved in the creation of a startup team.

The individual who comes up with an original and disruptive element, such as ideas, scientific discoveries, technical inventions, insights, unsatisfied needs or passions, is defined as the *founder*. However, *co-founders* are determinant to transform an idea in a business potential. In fact, the founder develops the team who sets up and grow the company, called *founding team*, by involving other individuals who share the founder's vision and who have complementary skills. The team should be aligned in aiming at *searching a repeatable and scalable business model* related to the founder's idea. Adopting the startup perspective, founders and co-founders are commonly referred to with the neologism of *startuppers*. They should be *passionate*, *determined*, *resilient*, *persistent*, *agile and curious*. Startup founding teams are generally composed by *two to four people*, who must demonstrate *mutual respect and trust*. It is considered to be the best team size as challenges involved with a startup are hardly manageable on a moral perspective by a single person. Moreover, too large teams are inefficient as they increase the number of disagreements among members when taking critical and immediate decisions.

When considering successful startup teams, it emerges that *previous experience of working together* is determinant. In fact, founding teams are more likely to fail when members have not spent time working together, for example in startup weekends or in incubators, or have previously built a friendship. The search for people to involve in the team usually has the personal network of family, friends and school/work colleagues as a starting point. Startup high-growth compared to big businesses is likely to be enhanced by *team familiarity*, which is driven by previous knowledge of a person.

A successful startup is made of smart and highly-skilled people, who perform their jobs in an extremely serious and professional way. Highly relevant in the selection process of co-founders is the distinction between people suitable for co-founding role or for employment role. The former is identified as a critical resource for the business success and it should not be easily replaceable. If the individual does not match these characteristics, an employment role should be offered by the founder to the human resource. Nowadays, the majority of startups are technology-focused. Thus, the founding team should be formed by technical people, having a background of software development, User Interface and User Experience design and other high-tech skills. It is relevant to have a co-founder dedicated to business aspects, as a marketable business idea requires to understand the needs of customers and to develop a clear and complete business model. However, often co-founders with a technical background have to assume the management role by developing a business-related know how. Business accelerators have a critical role in enabling all team members to acquire knowledge on fundamental managerial concepts and perspectives (Graham, 2005; Blank, 2013).

According to Mind The Bridge research on startup founders' profile (2013), individuals tend to base the *choice to enter* a startup on three variables: a) *personal characteristics and background*; b) *motivations and individual cognitions*; c) the *startup's environment*. In relation to this research, three categories of startuppers have been identified, which are likely to develop a specific type of venture:

- i) Techno-startupper are young potential entrepreneurs, who are often at their first working experience and have a strong technical background. The founding team of a First Generation Startup is usually able to collect a limited amount of money through bootstrapping, because of the null or weak business management background and the lack of previous working experience. The business idea is likely to be related to technological content, enhancing the educational background of team members.
- ii) Employees turned startuppers are characterized by a rich working experience history in conventional jobs and long employment tenure. Starting a business is seen as a career shift by turning into business an idea arisen during the working experience. These entrepreneurs are likely to found Born into Crisis Startups, which tend to collect a limited amount of money, as having access mainly to bootstrapping.
- have a strong background of business management concepts, accumulated thanks to studies, to multiple working experiences and to broad international experiences. A team formed by proven entrepreneurs is the *most successful* as it combines heterogeneous backgrounds and complementary skills, involving both technical and business aspects. By consequence, the *Scalable Startup* likely to be developed by a team of proven entrepreneurs is the most efficient in fundraising, having access to investments from venture capitalists, business angels, seed funds, accelerators and others.

The identikit of the average Italian startupper is of a 33 years old male person. He has a medium-high educational level (bachelor or master degree) and he often has studied or lived abroad for a certain period of time. He is likely to have accumulated working, research and entrepreneurial experience, both in the national environment and abroad, which is an extremely relevant element for startup success. Nowadays, strong relevance is given to women empowerment in the tech industry, supporting the formation of new ventures by female entrepreneurs.

Strongly connected to the entrepreneurial identity role for founding, it is relevant to note that 23% of founders are serial entrepreneur, starting more than one startup during lifetime (Mind The Bridge, 2012).

3.3 Team formation and time dynamics

Research on group development tends to focus on understanding the reasons and the dynamics leading small size groups to change over time. Accordingly, different models have been developed, resulting in two main perspectives on team formation, which will be better analyzed in the following paragraphs. Some theories consider group change as a step-by-step approach similar to all businesses, while other include the idiosyncratic nature of each team development history over time by viewing changes as phases which are potentially occurring in different moments of the team life cycle. The different stages and related theories in team formation are highlighted in the following paragraphs.

3.3.1 Stages in group development

Group development is likely to occur in stages or phases, which are considered as well identifiable periods of time during which sets of activities are likely to occur (Miller, 2003). The most noticeable and cited theoretical sequential stage framework on group development has been developed by Tuckman (1965), as a summary of previous research on group dynamics. The model identifies four straightforward stages characterizing the decision-making process of a team and the changes in group behaviour over time. These are named forming, storming, norming and performing. An update of the model has introduced the additional fifth stage of adjourning (Tuckman & Jensen, 1977). The theoretical and empirical researches that followed have highlighted the summative nature of the model, being a synthesis of different studies. Regardless, Tuckman's framework is still the most relevant starting point for analysis of team development and the generation of causal theories, and research on this topic tends to be consistent with it. Tuckman's stage model considers group development as a sequence of activities and behaviours experienced by the team in the life cycle. Each stage has been analyzed according to two perspectives: group structure and task activity. The former is related to the processes involved during in-group interpersonal relationships, while the latter focuses on task-related interactions among team members (Tuckman, 1965; Tuckman & Jensen, 1977; Farrell, Schmitt, & Heinemann, 2001). Tuckman considers team success related to the level of performance reached in terms of content, process and feelings, which is respectively what the team does, what processes are implemented to achieve goals and what is the quality of feelings experienced in group interaction. A deep analysis of the five stage model is provided (Tuckman, 1965; Tuckman & Jensen, 1977).

i) Forming stage: testing and dependency

At this stage, group structure formation is characterized by team members gaining knowledge about social and task-related behaviours considered acceptable by the group. The learning process occurs by observing reactions of trainers and other members ("testing"), by interacting with group members and by dependently imitating influential group members, trainers or existing group norms, values and organizational structures ("dependency"). Task interaction involves learning about the task, in terms of characterizing parameters, related basic rules and the group's traditional accomplishment processes.

During this stage elements likely to occur are: *unclear objectives, roles and responsibilities,* low commitment and emotional involvement, confusion, non-quality listening and no externalization of feelings. In such context some group member may overperform and others underperform as members may be confused or they may not understand the team's mission or other members role. *The team leader,* the most *influential members* and the trainer have a relevant role in determining the success of this stage. *Team culture* is not developed and the team experiences a *high level of anomie,* intended as poor moral guidance in behaviours, because a clear and shared cultural set has not been developed yet.

ii) Storming stage: intragroup and task conflicts

As members *start working together*, *resistance* to group and task involvement may occur. *Hostility* among group members and towards trainers tend to arise as individuals aim at preserving their identity from group pressure and at countering the formation of a group. *The interaction of individuals with tasks* is emotional, mainly with activities involving individual self-understanding, as they *feel misaligned* with respect to the group orientations towards task fulfillment. The storming stage in-group dynamics is characterized by *lack of cohesion*, hidden information, reluctance to disclose critical know-how, *cognitive and affective conflicts*, anger, anxiety, rule violation, defensive behaviours, continuous challenge of team-level approaches, and constant comparison among individual and team approaches. Initial disagreements may be handled by *avoidance* of other members, while *indirect behaviours*, such as passive resistance or backstage complaining, may be a way of expliciting in-group tension. Thus, in this stage *negative feelings* are the most likely to occur.

iii) Norming stage: cohesion and consensus

This stage is characterized by *cultural delineation*. As members overcome the conflictual phase, they are likely to analyse their past successes, failures and conflicts. Accordingly, they start accepting the group and the distinctive characteristics of each member, becoming more conscious and expressing their divergent opinions. This stage is characterized by the *group becoming an entity*, in which individuals are accepted and integrated in the collective structure even if not being similar. Members feel willing to develop a *team mission* and a *set of implicit and explicit norms*, which will then drive in-group communications and interactions, and the process towards goal achievement. By consequence, the foundations of group shared culture and emotions are being set because standards are being developed. While performing tasks, individuals feel comfortable in exchanging relevant points of view and their more intimate opinion are shared with other members. Group interactions become extremely *harmonious*, as the group reaches the highest levels of cohesion and task conflicts are null. This stage is characterized by a clear and new setting of goals and roles, by individuals' increased willingness to listen others' opinions, by an *open approach* to new perspectives and risks and by higher *cooperativeness, mutual support and group action*.

iv) Performing stage: functional role-relatedness

The group's *interpersonal structures* become the tool supporting problem-solving. As the in-group relationships have been developed in the previous stages and individuals are conscious of how social relationships should be managed, the team's energy is focused on *task achievement*. In addition, each individual's role in the social structure is flexible and related to a specific function. *Tasks assignment* is based on skills and experience, while open discussion and consensus drive *role adaptation*. By consequence, members become an objective tool for *activity execution*, positively impacting on the overall team performance. A shared culture drives behaviours, so a greater sense of solidarity, of respect and warmth among each other is developed, while less divergence among members is evidenced. In this stage, *creative problem solving* is enhanced. A performing group is characterized by *increased openness* in intergroup relationships, *by development of confidence and pride*, by high levels of *energy* and positive feelings, by higher levels of creativity, initiative and flexibility. All these elements are likely to lead to team performance.

v) Adjourning stage: group development-termination

Following the research progress on team development literature, Tuckman and Jensen (1977) reviewed the original framework, by adding a fifth stage. The aim of this integration was to evolve the model in a *life cycle perspective*. In fact, the additional adjourning phase is relevant only for teams splitting up. *Separation from the group* is a distinct final stage that must be considered, as it is faced by many groups, mainly when a project fails. Also referred to as *mourning*, it occurs when the tasks are completed and the team is splitted up. *Disengagement* leads individuals to experience sadness and anxiety, related to the separation from other team members and for the termination of a business venture, and to have feelings toward team leaders and other members. Relating to task relations, individuals tend to perform *self-evaluation*, in order to learn from termination. It should be noted that his stage is typical of many startups, which are not able to achieve growth and positive performance and decide to split up the team, as the business venture has failed.

These different group stages can be *externally observed* by identifying processes behaviours in a *retrospective free recognition procedure*. These elements have been used by Miller (2003) to develop a reliable and consistent retrospective questionnaire to assess group development based on Tuckman's model (1965), which has resulted to be congruent with qualitative observations. The items on which individuals are asked to self-assess their team development stage are shown in the table below (Table 3.1).

Different points can emerge from the analysis of team development according to the Tuckman's model, such as: a) some teams may accept *storming as an operational standard*, while others may *stop their development at the forming stage*; b) *degeneration into the storming stage* is likely to occur, unless norming is effectively rolled out; c) the *duration of* the cycle strongly various between teams (Tuckman, 1965).

Table 2.1: Retrospective study of dynamic team processes in group development

Development stage	Items to measure Tuckman (1965) constructs
FORMING	The team was attempted to discover what was to be accomplished.
	The team tried to determine the parameters to of the task.
	Individuals tried to determine what was to be accomplishedd.
STORMING	There was conflict between group members.
	Individuals demonstrated resistance towards the demands of the task.
	The group was experiencing some friction.
	Group members became hostile towards one another.
NORMING	Individuals identified with the group.
	The team felt like it had become a functioning unit.
	Group norms developed.
	Team members had become comfortable with each other.
PERFORMING	A unified group approach was applied to the task.
	A solution was chosen.
	Constructive attempts were made to resolve project issues.
	Solutions were developed.

Source: Miller, 2003, pg.126

Tuckman's model (1965; 1977) has been *integrated by other* models, which proposed alternative sequences in group formation. For example the stage of generation of plans, ideas and goals is followed by the one of selection and agreement on alternatives; a third stage relates to conflict resolution and norm development; the last stage involves task-related activities implementation and cohesion preservation (see McGrath, 1984 in Gersick, 1988).

3.3.2 Time evolution in teams

Many scholars have adopted a more complex perspective on group development than Tuckman's. The previously explained model *relates time to the team life cycle* and it considers the development stages as part of an *hierachical path*. The second and alternative perspective on team formation focuses on the *impact of time on team goal attainment and on problem-solving sequences*, which implies the observation of steps followed by the group in concretely taking decisions (for literature review see Miller, 2003; Marks, Mathieu, & Zaccaro, 2001). However, both *perspectives lack of focus on change mechanisms* from different stages, on the temporal pace and on contextual and environmental considerations. Gersick's (1988) punctuated equilibrium model and McGrath's (1990, 1991) Time, Interaction and Performance Theory (TIP) represent alternatives to the previous defined literature limitations, as they attempt to take into consideration those elements. These models start from the idea of team performance paths being *a sequential and simultaneous combination of several Input-Process*-

Output cycles. The framework developed on the manifestation of processes in transition and action phases has provided literature with content domain for team processes (Marks, Mathieu, & Zaccaro, 2001). However, no conceptual framework or set of team processes generally agreed, has been yet developed. Before discussing the different models, it is relevant to specify that *time* is intended as a valuable, critical and scarce resource for venture teams, which deal in competitive and dynamic environments. Moreover, the focus is on *individual perceptions* of this element, which are related to the interpretation of information time-related to represent and understand the environment (see Waller, Conte, Gibson, & Carpente, 2001).

i) Gersick's Punctuated Equilibrium model (1988)

Gersick (1988) longitudinally observed teams to develop a framework predicting the timing of progress and the external context influence on team development. The primary objective of the Punctuated Equilibrium Model was to understand the role of time in team goal-related activities. As expected, the use of a single model, as proposed by other authors, cannot be used to explain indistinctively all groups (eg. Tuckman, 1965, 1977), as each team goes through different processes and behavioral patterns, at varying paces over a period of time, developing an idiosyncratic group history. In fact, group changes may be regular and methodical or context-specific and discontinuous, depending on team's temporal and experience accumulation dynamics (Arrow, Poole, Henry, Wheelan, & Moreland, 2004). However, the timing of group composition and evolution results to be consistent among different teams. The punctuated equilibrium model highlights two phases characterized by a lack of movement, linked by a transition stage, specifically focusing on temporal dynamics within teams. The transition force depends on the time perception of the pressing deadlines. The focus of the model is on teams performing within a limited time. The study of eight teams life cycle (Gersick, 1988) showed that the earliest behavioral and processual norms emerge at the first team meeting and they are likely to persist over time, throughout the first half of the group's lifecycle. Little and non-influential improvements to these processes are performed by team members in this first period, as a team framework review is not felt as necessary. This is due to in-group changing at specific moments of the of the lifecycle, when the group feels that a progress is needed. This point in time tend to be generally identified with the moment in which the team is halfway with work progress, as a natural milestone. However, when teams work on schedules or on a goal achievement basis, the relevant timing midpoints leading to transition stages may be represented by schedules or the achievement of temporary milestones. When reaching a midpoint, members realise the need to search for innovative solutions to processual problems, as the previous approaches are not viable anymore. In turn, this search for a change is driven by timing in meeting deadlines, as, especially in business venture teams, the limited resource time must be efficiently managed. Reaching the midpoint is a critical event as the team sets adjustments to its group processess and tasks to adapt it to environmental resources and requirements. The midpoint of team development or of a group work leads to the transition phase. At this point individuals become aware of the limited nature of time. As a group, the actual and the forecasted roadmaps are compared, followed by improving

changes being applied to the processes. Transition is a critical and unique moment for the team's history as it is the only one during which members are sufficiently experienced in tasks and resource usage to oversee potential improvements combined with the feeling of the need to complete the task timely, while having enough time to implements improvements. The transition stage is an opportunity for team progress, which may have positive or negative results. By consequence, effective transformation during this stage, which is critical for team success, must not be taken as granted. In fact, teams may be unable to perform improvements or the could feel satisfied with the status quo. Transition is followed by a second period of occurance of irrelevant changes, as the future re-adapted roadmap has been previously settled. Final task fulfillment or goal achievement requires the team an extra effort, in order to adequately meet stakeholders' expectations. The positive or negative outcome of the group work depends on the quality of decision-making and execution processes performed by each member since the beginning of the lifecycle (Gersick, 1988). The importance of the first meeting suggests leaders to carefully prepare it, as it is likely to determine the positive or negative performance of the group in the first period. Moreover, if during this event, team members express disagreement towards collective opinions or shared goals, the team leaders (or founders) should consider whether to start with a new project or to modify the group setting. Adaptations would occur only at transition stages, as earlier they are potentially contrasted by team members. After transition has occured, external individuals (eg. consultants, mentors, specialists, managers, etc.) have a critical role in achieving smooth execution of the team work, as objective, expert suggestions, new perspectives and required external resources are provided to the team (Gersick, 1988).

It is relevant to highlight the impact of the *external environment* on the process of team development, both during formation and during the two critical events of the first team meeting and of the transition moment. The composition of the group, the task structure, the supports from the context and the environment in which the team is formed (*i.e design of the group*) anticipates and influences the intergroup relationships, thus team dynamics. The contextual impact is on the *setting of lasting behavioral and processual norms*, which takes place during the first interaction among team members. The transition moment is strongly driven by group members' considerations on the external environment dynamics and inputs, which are critical for redefining the group's path (Gersick, 1988).

McGrath's Time, Interaction and Performance theory (1991)

Research on time and teams conducted in the 1980s was focused on small groups, usually formed for a limited time and for the experiment purpose. Only few scholars attempted to develop a dynamic model of team functioning in relation to goal achievement processes.

The *temporal* element has been considered as an *explicit factor* of team frameworks by McGrath (1991), who developed the *Time, Interaction and Performance (TIP) theory* based on in-vivo observations. The *simultaneous pursuance of a multiplicity of goals* by teams is emphasized. Specifically, the overall team goal involves the pursuance of a multiplicity of lower-level goals, developing a complex combination of interdependent task. In such context, time assumes the role of environmental factor.

The model is based on the concept that same group outcome may be reached by different groups following dissimilar routes, depending on *alternative combinations of engagement procedure* in activity performance at team-level, even if these stages of activities are similar among different teams. Groups follow an *idiosyncratic activity-time paths* to move from the start to the accomplishment of a task because of different needs and backgrounds.

Engagement modes are distinguished in: a) inception, b) technical problem solving, c) conflict resolution; d) execution. Inception and execution are sets of activities which certainly occur at the beginning and at the end of all group task perfromance. Inception includes activities related to the acceptance and the origin of a new project and it may be related to the goal choice. Execution relates to task attainment, involving the execution of activities critical for goal achievement. Modes which may potentially occur are technical problem-solving and conflict resolution. Problem-solving involves activities aiming at identifying solutions to technical problems (means choice). Conflicts lead to the emergence of conflict resolution activities, intendend to solve political issues (policy choice).

The previously explained modes include all activities which support *three functions:* production, group health or well-being, and member support. *Production activities* are related to the project progress. Trust and empathy among team members are the outcomes of *group well-being functions*. *Member support* activities aim at personally rewarding group members and satisfying their needs at individual-level. Activities not related to production tend to have a long-term indirect effect on task accomplishment (McGrath, 1991).

iii) Marks, Mathieu and Zaccaro Recurring Phase model of team processes (2001)

To further extend McGrath's model, a taxonomy on team processes considering time has been developed. The starting point is represented by *team compilation*, defined as the sequential framework of phases and transitions developed by teams in an idiosyncratic way, in which each team activity tends to occur in specific phases of the development of a group.

Differently from Gersick (1988) and McGrath (1991) and other authors, the *Recurring Phase model* (Marks, Mathieu, & Zaccaro 2001) consider team performance of goal-focused activities in *temporal cycles*, as a series of input-process-output episodes over time. As starting point, team processes are clearly defined as "*members' interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward organizing task-work to achieve collective goals" (Marks, et al., 2001, pg. 3). Team processes are related to members' interactions among them and with the environment in order to manage, to coordinate and to control task-work, towards goal achievement. <i>Task-work* refers to the way the team perform activities to fulfill the task, by interacting with tools, machines, systems and tasks.

The authors enhance the *role of episodes*, intended as identifiable periods of time during which performance takes place and reactions are available to achieve goals. In fact, these represent the *rhythm* of team performance over time. An episode conclusion usually leads to the start of another. The *duration*

of an episode depends on the type of tasks to be performed by the group, on the technological set of tools and on the path to be followed in task accomplishment.

It is worth to be noted the *differentials in time length* of each episode and in the consistency with others. In fact, *longer-term episodes* are likely to be divided into *sequential subepisodes*, to enable a better task accomplishment as being more limited in objective and duration. Team's daily activities require a multitasking effort from the members of the group, as they are often required to work on a multiplicity of different episodes over time. This implies that the group must work *simultaneously on action phases* and transition phases related to different tasks. The model categorizes ten process dimensions within three categories: transition phase processes; action phase processes; interpersonal processes.

- a) Action phase refers to the time period during which the team performs context-specific activities to achieve goals. For example, a marketing team performs activities related to the achievement of an advertising campaign, while a product development team aims to coordinate efforts and goals. The processes most likely to occur are the action phase ones. These involve monitoring progress toward goals; systems monitoring; team monitoring and backup responses; and coordination activities.
- b) Transition phases are related to the time period involving the process of learning from past mistakes, together with the analysis, evaluation and the future roadmap plan for goal achievement (eg. staff meetings, action reviews, etc.). These are usually related to the processes of mission analysis; goal specification; and planning and evaluation activities to achieve goals and learning from past mistakes.
- c) Interpersonal processes do not occur in phases, even if the related challenges tend to change according to the different time period. These processes are critical for the effectiveness of action and transition phases and related methods. They involve sets of activities which are implemented to manage interpersonal relationships, such as conflict management; motivating/confidence building; and affect management.

Modifications to team processes occur because of the *cyclical interaction between action and transition phases*, which provide notice of the team process to be implemented at a given point in time. The *duration*, the *frequency* and the *ability to anticipate adaptations* to each phases depend on multiple factors, such as team mission and the objectives, environmental context, team members' experience, shared norms and culture, and leadership. The identification of action and transition phases within an episode is critical to understand the moment in which team processes become more salient.

Though research has been conducted on transition and interpersonal processes involving New Venture Teams, future work should focus on action processes and, generally, on how different types of processes impact on team performance (Klotz, Hmieleski, Bradley, & Busenitz, 2014).

The previously explained time models are useful to have a general overview over elements related to time which affect team process.

3.3.3 The impact of time pressure on team performance

Time factors such as *project deadlines, scheduling and integrated coordination* have a relevant impact on team functioning, in terms of strategy, timing, and role assignment. Nowadays, the team context is extremely challenging, because of the increased relevance of teams on entrepreneurial success. By consequence, high performing teams must be able to manage the processes involved in the fulfillment of complex tasks while maintaining control on time pressure.

Empirical research on teams has shown both positive and negative *effects of time pressure* on performance. Time has an extremely relevant impact on performance, as it enables to set the pace of team performance and it impacts on task accomplishment. In fact, in-group behaviours are determined by time-based rhythms (Marks, et al., 2001). Moreover, multiple tasks and activities must be performed in a synchronized way by teams (McGrath, 1991; Marks, et al., 2001). However, the influence of time on team outcomes has been found to be both positive and negative. *Team accomplishments* are the result of team members' sequential and synchronized tasks to achieve both collective and individual goals. Nonetheless, research focus should be shifted on the factors which lead to different influences. *Successful teams under time pressure* manage individual tasks interdependently with other members, while unsuccessful ones focus on individual task accomplishment, avoiding task management at team level (Maruping, Venkatesh, Thatcher, & Patel, 2015).

Time pressure has been defined by various authors as the perceived time shortage in completing tasks, as a consequence of an evaluation of the environment in which the task is accomplished (see Maruping, et al., 2015, pg. 1315). Most research considers time pressure having a U-inverted relationship with performance, as it negatively affects it when pressure is extremely high or extremely low (for a review see Harrison, et al., 2003). In relation to the degree of previous knowledge among members, time spent together by team members increases the *level of familiarity*. This effect in turn enhances coordination, role assignment and reduces inefficiencies due to hidden information, resulting in higher speed and quality in *performance*. Moreover, a stronger *focus on task performance* is empowered by previous knowledge and experience among members, resulting in a general positive impact on outcomes. Focusing on entrainment, empirical results showed how the *rhythm established at the beginning* of a task impacts on the pace of the future related activities. However, when *tasks change*, new levels of team engagement may occur. Entrainment effects persist despite time limits and interruptions, while *team leaders* have a strong impact in transmitting the pace and coordinating the new task (Harrison, et al., 2003).

According to a different empirical study (Chong, Van Eerde, Chai, & Rutte, 2011), especially when hindrance time pressure is experienced, *team coordination* is boosted by team members' *identification with the group*. This, in turn, reduces the negative impact of time pressure on performance. *Affective feelings and social interactions* are likely to enhance synchronization of the team work flow and ingroup support, leading to a better quality performance and the experience of positive group affect. Additionally, the *motivational role* of time pressure, rather than the discouraging one, is enabled by a strong *team temporal leadership*, intended as the behaviours of the team leader in facilitating the

development of the task execution rhythm, by supporting the modeling, the synchronization and the management of task fulfillment. *Temporal leaders* are critical in shifting the team's focus from action processes to task management processes (Maruping, et al., 2015).

Literature has considered relevant to distinguish among challenge and hindrance stressors, as the different impact of time pressure on team performance depends on both the level and the type of stress experienced.

Hindrance stressors tend to negatively affect job-related achievements, as individuals cannot identify a rational level of effort, enabling the response to context-related demands; by consequence, individuals experience low motivation in task accomplishment (Lepine, Podsakoff, & Lepine, 2005). Hindrance stressors lead individuals to evaluate in pessimistic and constrained terms their context. By consequence, team members tend to reduce task and group engagement, thus experiencing lower commitment and individual performance. In-group interactions will be avoided, negatively impacting on task synchronization (Lepine, et al., 2005). When time pressure or other stressors are perceived as a hindrance, they represent a threat for goal achievement, which is unrelated to the effort level (Pearsall, Ellis, & Stein, 2009). Hindrance time pressure generally shows a *negative impact* on team coordination and performance (Chong, et al., 2011).

Conversely, *challenge stressors* are associated to positive impacts on taskwork, job engagement and strong motivation. These are positively related to in-group coordination, to performance quality and to overall team execution (Chong, et al., 2011). In fact, in this situation individuals tend to believe in a positive relationship between effort in task execution and the likelihood of achieving goals. These benefit teams in behavioral, cognitive and affective terms, as they enhance the development of strategies focused on collective problem solving. Adapting this to the specific case of challenging time pressure, teams consider their situation as an opportunity to be faced with an innovative strategy. Therefore, members will be more motivated and positive; they will experience great confidence in the team ability to be successful in the environment; they will allocate more effort in activity performance and they enter a problem-solving discussion (Lepine, et al., 2005). Coordination and help provided to others will increase, while individuals will be less likely to isolate from the team (Pearsall, et al., 2009).

As analyzed in the previous chapters, stronger social interactions enhance the *emotional contagion* process among team members. By consequence, in-group interactions are likely to make individual perceptions of time pressure impact on other team members. *Combinations of challenge and hindrance* stressors have been found to enhance the negative effects on teams, especially on their ability to cope with environmental dynamics, leading to the break down of group relationships (Lepine, et al., 2005).

An effective coordination of simultaneous team processes is critical for the transformation of team inputs into high-quality outputs (Maruping, et al., 2015). Many situations involving intense time pressure have empirical evidence of enhancing positive performance. Organization-level perceptions of time pressure have obtained increasing attention, because of the critical importance of venture teams in coping with a fast and dynamic environment. Time pressure is experienced both at individual and group level, which

in turn impacts on team collective behaviours and actions, due to emotion transfer and emotional contagion.

It is worth to illustrate the *measurement variables* commonly used to assess *team performance* and time pressure. The former is identified by: a) the functional product match with clients' perceptions, b) the overall high quality of the product/service, c) the budget meeting and schedule alignment in the development of the product. Conversely, *time pressure* is measured by: a) the assessment of the experienced feeling of high pressure for timely task completion; b) the team members' perception of too short scheduled time to complete tasks; c) the thought of short duration of tasks themselves (Maruping, Venkatesh, Thatcher, & Patel, 2015).

3.3.4. Time deadlines and team performance

Organizations are subject to deadlines, in order to sustain the competitive advantage and be responsive in the dynamic external environment. The remaining time up to the deadline is considered as a measure of progress and as a motivator to manage efficiently and effectively the remaining time resource. Researchers commonly refer to time deadline as the point in time representing the supposed time limit by which the task should be completed or the goal achieved. It is commonly considered as a temporal goal (Waller, Conte, Gibson, & Carpente, 2001; Waller, Zellmer-Bruhn, & Giambatista, 2002). Literature has been focusing on deadlines and on their impact, as these are considered to be a motivator factor providing groups with a rhythm in task completion within the time framework.

The overall effectiveness of the team and of the organization is positively related to the team's ability to adapt to task-related and environment-related changes in a timely manner and to time schedule changes. In fact, meeting project deadlines on time is a measure of successful performance (Waller, et al., 2001). To complete tasks on time, coordination among activities related to the various business functions involved is required over the entire time frame.

Additionally, when approaching a midpoint, individuals tend to shift their task focus and modify their task effort accordingly (Gersick, 1988). Successful venture teams are characterized by the ability to continuously adapt to unexpected events and to a changing environment. By consequence task and project accomplishment may require task activity reorganization because of not anticipated deadline changes.

Individual perceptions of task deadlines may differ among team individuals, who may see them as goals or as a measure of the remaining time resource. These differences may have a negative impact on the ability of the team to complete the task by the deadline, as team members may need a longer period of time to reach consensus on critical decisions and to engage in adaptive behaviours (Waller, et al., 2001). The pace of task completion is referred as the rate of task performance, which follows a positive function with activity execution. In fact, the approaching deadline enhances team motivation to increase the task pacing, thus the effort involved, to meet the deadline (Waller, et al., 2002).

In relation to deadline modifications, a note on current literature must be done. Most of the literature on time impact has focused on stable deadline conditions (Gersick, 1988; McGrath, 1991; Marks, Mathieu, & Zaccaro, 2001; others); however, groups subjected mainly to dynamic and continuously changing deadline conditions are becoming more relevant.

The relationship between time deadline and task pacing is more complex than a linear one, typical of stable deadlines. A research focusing on dynamic deadlines (Waller, et al., 2002) shows how teams with changed deadlines are keen to experience higher attention on time and individuals' attention to time increases when closer to the time limit. Moreover, when a deadline is anticipated, the group will have a lower impact on task activities related to attention on time with respect to teams with stable deadlines. The possible explanation is that the shortened deadline has not developed enough time pressure to lead to a crisis reaction and to a change in task pacing. Individuals increase their pacing behaviour, in order to adapt the time pace and adapt to changes (Waller, et al., 2002).

Teams which are mostly affected by time pressure changes in project deadlines are television news crews, aviation crews, power-control room teams, surgery teams and software and ITC-related products development teams (Waller, et al., 2001).

3.4 Conclusions

Founding teams are one of the most important elements of a business venture. Co-founders share a vision and put effort in order to achieve common goals, in a coordinated way among each other. In this chapter, an overview of the most relevant theoretical frameworks on team development has been presented. This has enabled us to better understand the stages each group deals with from its creation to its eventual termination. The sequential stage formation, developed by Tuckman (1965) and integrated by Tuckman & Jensen (1977), provides an exploration of team development and the related members' behaviours involved. Latest focus of literature has been on the integration between the time dimension and group development models. The most important and appropriate models which include temporal dynamics are Gersick's *Punctuated Equilibrium model* (1988) and McGrath's *Time, Interaction and Performance* (1991). However, the first academic efforts in studying time focused on groups with a limited duration and considered time-related elements, such as deadlines, as static factors.

To further develop Gersick's model, McGrath introduced the idea of *individuals being involved in multiple tasks* which must be executed in a synchronized and coordinated way with other tasks and other members. An evolution from TIP proposition is the *Recurring Phase model of team processes* (Marks, Mathieu and Zaccaro, 2001), which proposes a framework of team processes focusing on recurring stages. Their proposition classifies team processes in action, transition and interpersonal ones, which tend to occur in specific times of the team development process.

A quick overview of our literature review has been on *time pressure impact*. Task *deadlines* getting closer increase team's perceived time pressure, which may have *both a positive and negative impact* on team's performance. By consequence, adequate management of related behaviours and dynamics may enhance the quality of team-level and individual-level outcomes.

Our review of group dynamics literature, focusing on the stages of development, on time evolution, on the impact of time pressure and deadlines, aims at partially extending the model of Team Entrepreneurial Passion formation and evolution, proposed by Cardon, Post and Forster (2016) by including the impact on team behaviours and team entrepreneurial passion of temporal dynamics, of time pressure and deadlines and of the development stage the group is in.

CHAPTER 4

TEAM ENTREPRENEURIAL PASSION IN EARLY-STAGE STARTUPS

4.1 Introduction

In the previous chapters of this dissertation, a literature review has been performed on Entrepreneurial Passion at both individual and team level and on the impact of time in new venture teams, such as startups, in relation to group development and time pressure. The present case study analysis aims to respond to recent literature claims on the *need of empirical research on TEP* and on the *observation of time impact on teams and on their collective emotions*, in order to integrate the TEP model.

The aim of this chapter is to introduce the reader to the case study on startups participating to the two acceleration programs by H-FARM: Fashion & Retail accelerator and Wellness accelerator, starting in Spring 2016. This has represented the context of data collection according to qualitative research methodologies. It is relevant to highlight the role of myself as both researcher and acceleration team member. In reading the present case study, it should be born in mind that the focus is on internal group dynamics and on affective and identity processes which may impact on the emergence of Team Entrepreneurial Passion and on the influence of this collective construct on individuals.

The present chapter is structured starting from the description of the context of the case study: H-FARM and the startup acceleration program (par. 4.2). To follow, the research model is presented in detail (par. 4.3). We present the *qualitative research* model, the research question, the research methodologies, the timing and the tools used to collect data and the unit of analysis. The last paragraph provides a thorough description of information collected through interviews, weekly questionnaires and diaries, observations and analysis of documents and internal data, thanks to the on-site presence over the period of 11 weeks. The aim of the *descriptive data analysis* is to enhance the role of time on the development of Team Entrepreneurial Passion and on its impact. Moreover, the focus will be on time dynamics occurring in teams.

4.2 The Context: H-FARM business accelerator

As previously discussed, the context is extremely relevant in the definition of behaviours and norms, especially at team level. The *choice of startups* as object of study is related to the early stage in the business and entrepreneurial team development process.

H-FARM

The organizational context where our empirical analysis was conducted is *H-FARM*. This is an Italian organization whose business model is based on three segments:

- i) H-FARM Investments: the segment's aim is the creation of an innovative platform driving and enhancing the development of new business models, by investing and mentoring startups. H-Farm, together with Corporate partners, provides innovative business ventures with the necessary financing during the seed stages, while offering services to speed up business development. The unique offering of H-FARM Acceleration Programs are an inspiring workplace, a centralized general administration, a press office, human resources, legal and financial consultancy, influential business and social network and a wide range of experts and mentors providing entrepreneurial learning.
- H-FARM Industry: the purpose of this division is to drive big corporates through the digital transformation process;
- *H-FARM Education*: the focus in on providing digital education to professionals and to students from primary school to the highest levels.

Acceleration program

Our data related to the unit of analysis was collected through H-FARM business accelerator. In fact, the observation group is formed by startups participating to an *acceleration program*.

Academic literature refers to an acceleration program as a 3-6 months fixed-term program, which provides startups with mentorships, focused seminars and a business and financial network, both at startup and cohort level, usually in a co-working environment. The final moment of an acceleration program is the pitch event, referred to as Demo-Day (or Demo-Night), held in front of investors (Cohen & Hochberg, 2014). The target participants are pre-seed, seed and early stage startups.

Acceleration programs in the world *differ along various characteristics*, such as profit or non-profit orientation, the amount of cash-for-equity applied, the eventual provision of a stipend, the educational activities duration, the possibility to use a co-working environment, the vertical focus and partnerships with corporates or other institutions. However, the following common features can be identified (Miller & Bound, 2011):

- o the highly competitive application process taking place on a cyclical basis;
- o the *cash-for-equity investment model*, involving the provision of an initial pre-seed investment to the startup in exchange for a share of equity (typically 5-10%);
- o the focus on a *team-based startup* rather than solo-entrepreneur one,
- o the provision of mentoring and services for a fixed period;
- o *mentorship activities* at both individual and cohort level to enhance entrepreneurial learning.

Similar to other accelerator's processes, activities related to H-FARM Acceleration Program are characterized of three phases:

i) Scouting and selection: when the Call for Ideas is opened, startups that meet the requirements can submit their application for the participation to the Program, which is vertically focused on a specific industry, such as food, wellness and fitness, fashion and retail, etc.

These applications are screened by the accelerator team, which evaluates elements such as the idea innovation level, the market feasibility and competition degree, the execution stage of the startup, the affinity with the focus of the acceleration program and with H-FARM values and the team completeness.

The final selection of the participating startups depends on the outcome of their pitch during the Open Day and a one-to-one interview with the selection team.

- ii) Acceleration Program: the duration of the program is of 4 months, three of which are focused on strategy and business model definition; product development and design; marketing & sales. The last month is totally dedicated to fundraising. Over the entire acceleration program, startups are present on site in H-FARM premises. During the strategy month, the business model is clearly set, a roadmap draft is defined and the communication materials with the external environment is prepared, following suggestions from mentors and applying knowledge acquired during seminars. The following period involves coaching activities on the development of product technicalities, on designing the customer experience, on tailoring the product to the customer needs and defining a plan to reach the market. Marketing and sales activities involve seminars and mentorships related to sophisticated tools and techniques to effectively implement the marketing plan, to build a strong and wide customer base and to analyze results and adjust the strategy. Each period envisages reaching temporary milestones, such as the marketing plan, the presentation deck, the Alpha/Beta release, etc.
- iii) Fundraising: the forth month of the program focuses on preparing startups to relate with investors in order to collect funds, which are essential for the achievement of the business plan. Coaching and mentoring provided is related to the preparation of the business plan and of the financial plan, other than completing the product development, at least at the MVP stage. The acceleration program will end with the Demo Night (or Demo Day), the final event during which accelerated startups pitch to an audience of investors, entrepreneurs and partners. It is an opportunity for the startup team to meet potential investor, enlarge their network, acquire visibility and obtain feedbacks. This represents one of the most critical phases of the program, towards which startups work during the previous period and on which there are high expectations.

Acceleration programs in H-FARM tend follow a *cyclical path*. In fact, every year more than one program is run, usually referred to as "Spring Program" of "Fall Program".

In H-FARM, both Industry and Corporate accelerators are run: in May 2016 the *Fashion & Retail Industry acceleration program* and the *Wellness Acceleration program powered by Technogym started*. The most common type of acceleration program characterizing both H-FARM and the entire accelerator environment is the *Industry Accelerator*, identified by partnerships with influential corporations in the industry. However, these do not assume the role of investors. Thus, at the end of the acceleration program, startups must find potential investors for their business.

An increasing trend followed by accelerators is determined by the *Corporate Accelerator*, characterized by the partnership with the most relevant companies in an industry sector, which are also potential investors in startups. The goal is to enable Italian and foreign companies to perform open innovation, selecting the best potential startups in their sector and provide these with mentoring and coaching, in order to increase the likelihood of successfully investing on a successful, high-growth and disruptive startup and to strengthen and update the corporate know-how. Extremely relevant in Corporate programs is the partnership among the startups and the corporations, which provide the former with experience, know-how and tailored-coaching.¹⁹

4.3 The research model

In this paragraph the research model applied to study Team Entrepreneurial Passion in startup teams is being presented. This has been developed following the detailed structure of qualitative case study research, suggested by Yin (2006).

Prior discussing the research model, it is important to notice that in the following paragraphs the labels "group" and "team" are used interchangeably, as suggested by the majority of literature.

4.3.1 Research model and case study design

Enhanced by the increasing value acquired by qualitative research in business-related topics, the choice to conduct a *qualitative exploratory case study research* is considered as the most suitable to perform an *empirical test of the Conceptual Framework of Team Entrepreneurial Passion* developed by Cardon, Post, & Forster (2016). In fact, models and frameworks studying the development of Entrepreneurial Passion (EP), of Team Entrepreneurial Passion (TEP) and of group dynamics consider *time as an implicit element*. In order to explicitly highlight the impact of time on various elements, a qualitative approach is adopted.

Qualitative research is a multimethod research type, which enables the interpretation and the understanding of a phenomenon within a complex context, formed by institutional, cultural and

¹⁹ H-FARM: http://www.h-farm.com/en/investments/

organizational influences. Typically, this type of research addresses questions related to how a certain experience is developed and to understand the underlying sense by using a mixed data source framework. In management research, it provides insights on social processes underlying managerial constructs (Ghepard, 2004). According to Birkinshaw, Brannen, & Tung (2011) qualitative methods are valuable in better understanding an interesting phenomena, which can be analyzed only by combining different theoretical, conceptual and methodological backgrounds. Thorough and exhaustive qualitative research requires the study of an innovative, disruptive and worthy of attention topic, which has not been the focus of a large extent of previous research. Moreover, the *exploratory* framing requires to explicitly refer to the existent literature and to be grounded on a rigorous theoretical frameworks. A diversified assortment of methods, concepts and theories can provide a better understanding of the researched issue.

Typically, the referred model should have a theoretical background, based on both business and social psychology-related processes (for example affective and identity processes), which requires empirical observations. The required data are usually collected in a more effective way through more than one method. This approach is found to enable flexibility and personal interaction between the researcher and the samples (Ghepard, 2004).

To analyze our specific case study, the operationalization of the literature review of Cardon, Post & Forster (2016) model and of the related emergence and influence processes is facilitated by the application of the *case study method*, because it is particularly suitable for our *exploratory objectives*, as defined by Yin (2006). In fact, *our aim* is to describe the *TEP formation and change processes over time* and the *context* in which this phenomenon occurs. Moreover, we intend to identify elements which are likely to be observed in these *processes*, which have *not* been *considered* by the Conceptual Model of TEP (Cardon, Post, & Forster, 2016). This partially represents our theoretical base, on which our research is grounded.

Case study research involves the exploration of a phenomenon in one or more situations, within a time and location setting, by collecting data in a thorough manner through multiple sources (observations, interviews, textual documents, audios, videos). To summarize, according to Yin (2006), a *case study* is an empirical inquiry identified by two features:

- o a thorough and contextual examination of a phenomenon;
- o non clearly defined boundaries between the phenomenon and the real-life framework.

As researchers, we have started our case study with a general research question, related to understand how team entrepreneurial passion develops and evolves over time. As our researched was progressing, we better focused in:

How do time-related elements impact on the development of Team Entrepreneurial Passion and its rhythm?

The most suitable type of analysis is an *exploratory case study*, as team entrepreneurial passion has no previous empirical study research and startups participating in an acceleration program are a quite new object of empirical research study. Moreover, time is a relatively new element to be studied in entrepreneurial passion-related studies (Collewaert, et al., 2016). Team Entrepreneurial Passion emergence and influence framework has been theoretically studied, starting from an integration of the previous literature on entrepreneurial passion at individual level and that related to social behaviours emerging from group interactions. The model's authors claim for empirical testing of the theoretical model, as all measures for the related constructs are available (Cardon, Post, & Forster, 2016). In order to deeply understand observed reality, we have integrated the proposed model with literature on group dynamics and time (Gersick, 1988; Kelly & Barsade, 2001; McGrath, 1991; Marks, Mathieu, & Zaccaro, 2001; Tuckman, 1965).

Our present work is a first empirical study on the completeness of the model to describe the Team Entrepreneurial Passion dynamics. We are interested in looking at the same issue in different startups within the same business acceleration program. A *single case* is relevant when the case represents a critical test of existing theory, an unique circumnstance or when it serves revelatory or longitudinal purposes. We conducted a *single case study with embedded units* as it would enable us to explore the case while considering the influence of various subunits on the specific dynamics and associated time-related attributes on the development of Team Entrepreneurial Passion. Looking at *sub-units*, such as startups participating to an acceleration program, is a powerful tool as data collected during an acceleration program can be analyzed within startups separately, providing relevant insights. The choice of engaging in such rich analysis is to better explain the case study (Yin, 2006).

To guarantee the quality of the empirical research, *tests on validity and reliability* are relevant to be conducted. These have been specifically performed in our case study, following the tactics suggested by Yin (2006). To identify the *correct measures* for studying individual and team entrepreneurial passion and the time impact, multiple sources of evidence have been adopted: weekly diary and questionnaires; in-depth and focused interviews; observations from external individuals participating to the acceleration program; participant-observations and access to internal documents and other data. To *establish a chain of reference*, the entire process of data collection has been mapped. Moreover, the continuous review of the analysis results and of the case study report by Professor M. Gianecchini contributes to ensure the *construct validity*. As we have developed an exploratory case study, *internal validity* tests were not performed. However, to define the fields of *generalization of the study's findings*, the research design has been accomplished according to theory currently existing on Individual Entrepreneurial Passion (Cardon, et al., 2009b; Cardon, et al., 2013a), on Team Entrepreneurial Passion (Cardon, Post, & Forster, 2016), on group development stages (Tuckman, 1965, 1977), on group dynamics (Kelly & Barsade, 2001) and on time in groups (Gersick, 1988; McGrath, 1991; Marks, Mathieu, & Zaccaro, 2001). Noticeable elements have been highlighted, after comparing the narrative description of the accelerator

program's dynamics with the theoretical frameworks and concepts. Thus, *external validity* of the construct can be sustained. A *reliable data collection* has been performed, by following a detailed case study protocol developed before the start of the acceleration program (following Yin, 2006), continuously reviewd by Professor Gianecchini. A case study database has been developed, while collected data have been managed and analysed throught the entire collection period, in order to correct and integrated the collection method and the information obtained.

The *case-study database* is composed mainly by interviews notes, weekly questionnaires and diaries, startup and acceleration program internal documents, developed by managing and analysing information as being collected, by correcting and integrating the collection method in order to build a complete and effective data base.

4.3.2 Data Collection: Timing and tools

The empirical and longitudinal examination of the dynamics determining the emergence and the influence of TEP construct has been identified by researchers as an opportunity for future research (Cardon, Post, & Forster, 2016).

The analysis of affective, identity and in-group processes' development over time in order to examine the non-static nature of Entrepreneurial Passion, at both team and individual level, requires to implement data collection at multiple points in time (Cardon, Foo, Shepherd, & Wiklund, 2012), by performing weekly measurements of entrepreneurial passion items and by implementing other data collection over an extended period of time (Gielnik, et al., 2015).

This specific case study has implemented weekly surveys *for 11 weeks*, ongoing daily observations for the entire period and periodic informal and formal meetings. *Process observations* requires the research to focus on the progression of events, development stages and activities over time. *Critical events* can proceed simultaneously, influence each other and result from the occurrence of previous ones (Aaboen, Dubois, & Lind, 2012).

As the phenomenon of Team Entrepreneurial Passion-related dynamics and the early stage business ventures context are not always clearly identifiable in real-life, high relevance is assumed by data collection and data analysis strategies. *Case study data collection* does not follow formal standards; conversely the researcher must adapt procedures to non-predictable events or dynamics, in order to obtain all the information relevant for the case study. Data for case studies are the result of a *mixed data collection approach*, which combines multiple sources: documents, archival records, interviews, direct observations, participant-observation and physical artifacts (Eisenhardt, 1989). In order to assure the *validity* of the qualitative research and to capture different dimensions of the same phenomenon, a *triangulation of data* is being set, through a variety of data collection methods and from different evaluators (Ghauri, 2004; Yin, 2006).

Field work has been conducted *from 16th May to 30th July 2016*, which is from the Kick-off day of the acceleration program to final part of Marketing & Sales period, before the summer holiday break. Information and data have been gathered from multiple sources, such as interview, diary, questionnaire,

direct observation, participant-observation and documents. In the following paragraph, more details on the *different methods* are provided. Table 4.1 summarizes the sources of evidence used for the data collection.

i) Questionnaire and diary

To explore the constructs and the theoretical mechanisms forming the Conceptual Model of TEP emergence and influence cycle (Cardon, Post, & Forster, 2016), a *weekly questionnaire* has been submitted to each member of the *9 startups* participating to the Acceleration Program *for the first 11 weeks of the Acceleration Program*, which are those focusing on strategy, on product development and on marketing and sales.

Week 1 survey was handed in using a paper format, in order to individually ask respondents to participate to the survey, to explain the objective of the research, and to explicit the requirements in terms of content and time. The *following weekly surveys* were submitted using an online format, sending out a weekly email which contained the link to the questionnaire, because of specific requests arising from participants to receive the questionnaire in a format quicker to be filled in. The used format is a *combination of a diary structure and of a questionnaire format* (Appendix A).

According to previous studies, the first period of submission of questionnaires tend to experience the highest attrition rate. To avoid so, especially during the first three weeks, a direct contact with participants was kept by the researcher. Even if some weekly survey responses were missed, continuous but discrete interactions with participants were held, in order to reassure respondents on the high value of their contribution for this study. Continuous checks on the response rate were performed throughout the observation period, and individuals missing to answer have been informally interviewed to understand the reasons of their no response. The majority of non respondents provided as justification "the lack of time" in completing the survey, especially when the program entered the most intense period. Responses to open questions have shown different individual writing styles. Some respondents answered in a complete and detailed manner, by describing feelings, personal activities and events in an explicit manner. Other respondents used a more synthetic response style. As the acceleration program entered the most intense phase, responses to questionnaires reduced over time, as shown in the graph below (Figure 4.1). This evidence confirms the difficulties in collecting data using questionnaires or diaries, as evidenced by literature (Cassell & Symon, 2009).

Types and dates	Amount and sources	Use in the analysis	List of interviewees and professional background
<i>In-depth interviews</i> May – July 2016	57 interviews to 41 startup members (co-founders, permanent members, temporary members) for a total average duration of 15 hours.	To collect the interviewee's perspective on the startup progress, on actual and perceived in-group interactions and behaviours, on group dynamics, opinions on the occurring events, on interactions with other startups, on elements related to impetuous reactions, etc.	All member of <i>Team 1</i> , 2, 3, 4, 5, 6, 7, 8, 9
Focused interviews Week 6 (end of June 2016)	22 interviews with 22 startup members (co-founders and permanent members) for a total duration of 10 hours (average of 30 min/interview)	To collect the interviewee's perspective on entrepreneurship, on team and individual entrepreneurial passion, highlighting elements not easily noticeable from written questionnaires or informal conversations. To obtain a self-assessment on group development stage at week 1.	Team 1: member 1-2; Team 2: member 1-3; Team 3: member 1-2; Team 4: member 1-4; Team 5: member 1-2; Team 6: member 1-2; Team 7: member 1-2; Team 8: member 1-2; Team 9: member 1-2
Questionnaires May – July 2016	22 questionnaires on a weekly basis to 22 startup members (co-founders and permanent) for 11 weeks for a total of 242 questionnaires.	To obtain data related to entrepreneurial passion at both individual and team -level	
<i>Diary</i> May – July 2016	22 questionnaires submitted on a weekly basis to 21 startup members (co-founders and permanent members) for 11 weeks for a total of 242 questionnaires.	To record startup members perspectives on processes occurring at team level, on individual positive and negative feelings, reactions and behaviours, on activities performed weekly. To capture individual and team affective changes over time, with a special focus on time deadlines.	
Informal interviews with participant- experts May –July 2016	Interviews in an ongoing basis during 55 days in the field. Information derive from internal startup meetings, of one-to-one meetings with mentors/experts, and partner companies' managers, with the accelerator team, from pitch presentations and from team daily activities.	To collect insights and opinions on team dynamics, time processes and entrepreneurial passion based on previous interactions with other startups and on general startup environmental dynamics. To obtain objective feedbacks on startup's performance and progresses over time, on perceived quality of team processes, on team effort and effectiveness of execution and on the ability to meet deadlines.	Accelerator team: member 1-9; Mentor 1-10; Partner company manager 1-4.
<i>Participant-</i> <i>observations</i> May –July 2016	Observations of daily activities and behaviours of 41 team members present on-site and of communication with technology-mediated team members, in both business and leisure, formal and informal moments during 55 days in the field.	To follow, witness and remark the development of affective, identity and other unforeseen processes leading to the emergence and influence of TEP over time. To observe the impact of time-related constructs (such as time deadlines) on group processes velocity. To perceive individual and team dynamics.	
Documents and Archival Records May – Sept. 2016	92 documents, articles and others; 3 informal channels; correspondence by email.	To reconstruct the critical event timeline, combined with business milestones reached by startups (time deadlines), in order to contextualize experienced behaviours and feelings. To follow and reproduce each startup business and team development. To obtain insights on team processes velocity	

Table 4.1: Collected data and use in analysis (Source: own elaboration)

Questionnaire and diary response rate 90,0% (17) 80.0% 70,0% 59,1% 59.1% (13)(13)54,5% 60,0% (12)Response rate 50,0% 40,9% 40,9% (9) (9)40,0% 31.8% 31.8% 31,8% (7) 27,3% 27.3% (7)(7)30.0% (6) (6)20,0% 10,0% 0.0% Week 10 6 11

Figure 3.1: Questionnaire and Diary weekly response rate

Source: own elaboration from weekly questionnaire data collection

Diary

The first part of the submitted format is composed by *three open questions* presented according to a *diary format* and *three keywords* to define the week, which require respondents to record individual feelings and reactions, specific behaviours, in-group and social interactions and relationships, activities performed and critical events occurred. The diary is a document on the life experience, providing chronological evidence of public and private events, which are considered as relevant by the diarist (see Plummer, 1983 in Cassell & Symon, 2009). The choice of a diary study is related to the advantage of such format in providing suggestions on everyday activities and behaviours in a not noticeable way. It enables us, as researchers, to collect the team member's perspective on affective, identity and other processes occurring at team level over time. A diary related to a qualitative research rather than a quantitative one should not define in advance critical events, activities, attitudes or feelings expected. Conversely, it should represent for respondents a *subjective record of elements critical* to them in a specific time moment. Our objective of the diary submission is to deeply understand behaviours, reactions, externalized feelings, etc. from each respondent's individual perspective (Cassell & Symon, 2009).

The questions submitted are related to:

- i) The *main activities* performed and the *most relevant events* occurred during the week.
- ii) Events or situations which had a *positive impact* on the week, enhancing the experience of positive affective feelings, providing a reference to causes, consequences and personal considerations.
- iii) Events or situations which have *negatively affected* feelings experienced during the week, providing a description of the causes, of the consequences of other considerations.

As all 9 startups team members weekly experienced *similar activities*, because of the cohort feature of the acceleration program, personal insights may result comparable among individuals. By consequence, *three feeling-related keywords* to describe the overall week were introduced in the questionnaire. Keywords enable researchers to give a more tailored interpretation to data collected from various sources. We aim to use keywords to identify common feelings associated to the performance of activities related to a certain entrepreneurial domain or a shift in the type or the intensity of entrepreneurial passion experienced. The table below (Table 4.2) presents the keywords used by each respondent to describe the week. In brackets, it is stated the number of times a keyword has been used by different respondents during the same week. It can be noticed that over time the type of keyword used by startup members change, moving from more "enthusiastic/emotional" terms to words related to rational elements (e.g. productive).

Table 4.2: Keywords

Week	Keywords
Week 1	Inspiring (x3); New (x2); Excitement (x2); Stimulating (x2); Different (x2) Thorough provoking (x2); Development (x3); Hectic (x2); Settlement (x2); Fun (x2); Surprising; Informative; Strategic; Focused; Frustrating; Challenging; Stressed; Change; Productive; Feedback-providing; Tiring; Travelling;
Week 2	Challenging (x2); Refreshing (x2); Discovering; Focused; Coaching (x2); Eye-opening (x4); Stressful (x2); Educational (x4); Monotony (x3); Thought-provoking (x4) Motivational (x4); Interesting (x3); Inspiring (x2); Exciting (x2); Productive; Competitive; Enriching; Thoughtful; Happy; Tiring (x3); Intense; Innovative (x3); Satisfaction (x2); Creative; Hectic; Fun (x2); Indecision; Conflicting; Unpredictable; Pleasant.
Week 3	Enthusiasm (x4); Hectic (x2); Creation; Nervous (x2); Relentless; Fun (x5); Holiday relax (x2); Productive; Valuable (x2); Useful (x2); Insightful (x2); Work-life balance (x2); Surprising; Confusion; Intensity; Joy (x3); Motivational; Despair; Probing (x2); Interesting (x2); Satisfaction; Next steps (x2); Weariness.
Week 4	Happiness (x2); Enjoyment (x4); Clear strategic pathway (x4); Momentum; Deepening (x5); Relaxing party (x2); New perspectives (x2); Focus; Confrontational; Exciting; Motivational (x2); Innovative (x2); Honesty; Hard; Confusion; Despair; Collaboration; Serious; Productive (x4); Progressive; Eventful.
Week 5	Challenging (x3); Achievements (x2); Informative (x2); Networking/partnering (x3); Intense; Organization; Cheerful (x3); Enthusiasm (x2); Interesting (x2); Hectic; Motivational; Structure; Useful; Loyalty; Climb; Tiring (x2), Blocked; Fast; Frustration.
Week 6	Fun (x2); Momentum (x2); Exciting (3); Joy (x2); Hectic (x2); Worthwhile (x2); Achievement; Motivating (x2); Rewarding; Conflicting; Unproductive; Risk-taking
Week 7	Challenging; Intense; Interesting; Change; Relevant (x2); Impulsiveness; Uplifting; Motivational; Emotional (x2); Hectic; Technological; Frustration; Change; Excitement; Eventful; Fun.
Week 8	Inspirational (x4); Challenging; Interesting (x2); Motivational; Exciting (x2); Entertaining (x3); Troublesome; Creative; Joyful; Hectic; Unproductive; Rewarding; Troublesome, Useful; Stimulating.
Week 9	Empowering; Fun (x3); Demanding (x2); Intense (x2); Challenging (x4); Motivational (x2); Fascinating; Creative; Strategy-making; Hectic (x2); Educational Cheerful; Relationship building; Frustration; Impatience.
Week 10	Routine (x2); Boredom (x2); Productive (x2); Excitement; Entertaining; Tiresome; Rewarding (x2); Short time; Coaching.
Week 11	Motivational (x2); Tiring (x4); Family meeting; Challenging; Hard work (x3); Happiness (x2); Productive (x2); Strategy-making; Research; Valuable; Hectic; Optimism; Tiring; Family; Challenging; Hard work; Happiness; Intense; Productive; Stimulating; Irritation; Impatience; Rewarding; Emotional; Interesting; Fun.
	Common alphanetics from malls marking

Source: own elaboration from weekly questionnaires

Questionnaire

The structure of the second part of the weekly questionnaire presented related to the *collection of entrepreneurial passion data*, at both individual and team level, referred to the constructs of *Individual Entrepreneurial Passion*, of *NVT Passion Diversity* and of *Team Entrepreneurial Passion (TEP)*, which are represented in solid line boxes. In the following figure (Figure 4.2) the constructs being evaluated by the questionnaire are highlighted.

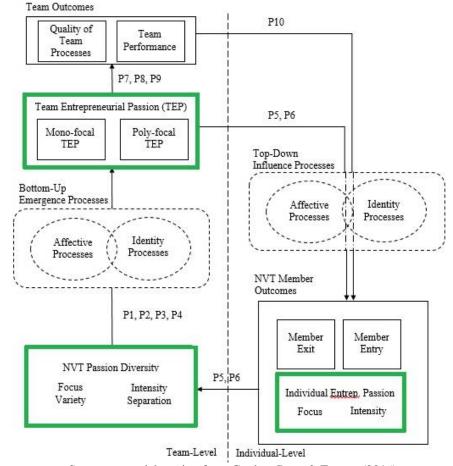


Figure 4.2: Constructs evaluated by the questionnaire of the conceptual Model of TEP

Source: own elaboration from Cardon, Post, & Forster (2016)

Previous studies have found that *Entrepreneurial passion* is an outcome of *entrepreneurial effort* (Gielnik, et al. 2015), integrating the common evidence of passion as the driver of effort (Cardon, Wincent, Singh, & Drnovsek, 2009; Baum & Locke, 2004). Starting from the methodological approach applied by Gielnik, et al. (2015), entrepreneurial effort was measured after participants completed the weekly activities. We desumed effort by asking participants the *amount of time spent* on each entrepreneurial role activity and the related *satisfaction degree*. In order to have a relative measure of the total amount of time spent working on the startup, each team member is required to specify the *total amount of weekly working hours*, dedicated only to the startup activity.

The graph below (Figure 4.3) shows the results of the *overall aggregation of startups' effort*, on a weekly basis. The histogram refers to the hours each team member spent in performing activities related to a

specific role identity (i.e. inventing, founding or developing), divided by the total amount of weekly working hours, in order to obtain a comparable percentage data not influenced by the size of the observed units. As it can be observed, the effort dedicated to each passion *fluctuates over time*.

The right axis is related to the *average weekly effort* over the acceleration program period. This data is computed by dividing the total weekly working hours by each week's number of respondents. The line bar shows *an increasing trend of the weekly effort* of each team member over time. The negative peak observable in week 3 is explained by the two days break due to national holiday, while the drop in week 10 is explained by the day off each startup took after H-FARM Summer Party. This trends is *an empirical evidence* supporting our conclusion that as deadlines get closer and the acceleration program gets into more intense phases, the effort in performing business activities of each startup member increases.

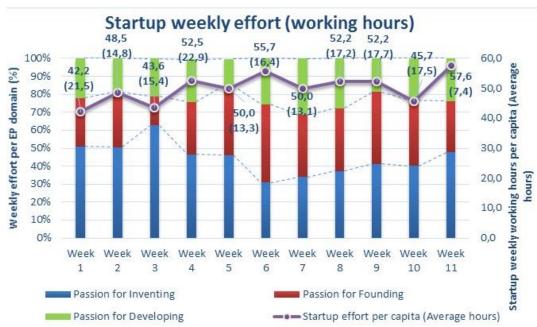


Figure 4.3: Weekly effort on entrepreneurial passion role domains of startups

Source: own elaboration from weekly questionnaire data collection

The questionnaire includes *items for measuring Entrepreneurial Passion at individual level* in relation to inventing, founding and developing domains developed by literature (Cardon, Gregoire, Stevens, & Patel, 2013a). Each of the role-specific aspect of entrepreneurial passion is different from the others, both in terms of concept and of empirical evidence. In order to fill in literature gaps related to the lack of measures translating theories into empirical models, it is important to have *clear*, *reliable and validated measurement method*, which enables to deeply study the nature and the relationship among elements of entrepreneurial passion.

Scholars (Cardon, et al., 2009b) have identified 13 items related to intense positive feeling and 3 elements accounting for identity centrality for all passion domains. The set of measures, as presentend in the related pilot survey performed by scholars, are presented below, distinguishing among the three

role identities and between intense positive feeling and identity centrality. The instrument developed also integrates elements to analyze the identity centrality for each entrepreneurial role and captures the characteristic of durability of the positive feelings experienced by the participants to entrepreneurial passion surveys (Cardon, et al. 2009b).

To use these items for our case study, these were adapted to the accelerator program context and tailored to be suitable for a startup team member. The survey's questions formulation represent the adaptation to the startup context of previous research surveys submitted to measure entrepreneurial passion (Cardon & Kirk, 2013b; Collewaert, et al., 2016; Gielnik, et al., 2015). The adaptation of entrepreneurial passion-related items for the use of the case study resulted in the formulation shown in Table 4.3 (column "questionnaire item") and in Appendix A. Theoretical items were grouped together by the researcher, in accordance with Professor Gianecchini, reduce the amount of questions to which respondents were required to answer in a weekly basis. Participants have answered to *six items related to intense positive feelings*, two for each type of role identity.

Answers to items related to the intense positive feeling were provided on a qualitative scale, ranging from "very unsatisfied" to "very satisfied", in order to measure the enjoyment and the excitement degree in performing specific activities, related to the three role domains.

In order to measure the significance of entrepreneurial role identities for each individual (i.e. *Identity Centrality at individual level*) for each role domain in entrepreneurial passion, responses to questions (10-11-12) related to the importance of a certain role identity for the individual were provided on a 5-point Likert scale, ranging *from "strongly disagree" to "strongly agree"*.

A weighted score for each entrepreneurial passion domain at individual level is obtained by multiplying the score corresponding to the intense positive feeling items and the identity-centrality score, as previous research papers suggest (Cardon & Kirk, 2013b).

The comparison between the theoretical items and the those as adapted in the questionnaire is shown in the table below (Table 4.3).

The results of the questionnaire data collection related to intense positive feelings experienced on a weekly basis by startup members for each type of entrepreneurial passion are represented on the graph below (Figure 4.4). It can be observed that the experience of positive feeling over time for each entrepreneurial domain fluctuates, reaching a higher level after the 11 week observation period.

Table 4.3: Validated items for Entrepreneurial Passion's dimensions and domains

Construct	Item (Cardon, Gregoire, Stevens, & Patel, 2013a)	Questionnaire item				
Passion for inventing new opportunities						
Intense positive feeling	It is exciting to figure out new ways to solve unmet market needs that can be commercialized.	Developing new products or services, and working with new prototypes (e.g. working on Alpha or Beta version of your product, improving the website or the content of your offer, etc.).				
	Searching for new ideas for products/services to offer is enjoyable to me. I am motivated to figure out how to make existing products/services better.	Searching for new ideas for products/services to offer or making exsisting products/services better (e.g. participation to conferences or workshops, reading specialist newspapers, scouting on similar startups, etc).				
	Scanning the environment for new opportunities really excites me.	-				
Identity centrality (Individual)	Inventing new solutions to problems is an important	Inventing new solutions to problems is an important part of who I am.				
Identity centrality (Team)	part of who I am.	My team considers important to be innovative and creating inventing new solutions to problems.				
Passion for founding new firms						
Intense positive feeling	Establishing a new company excites me.	Collecting and putting together the necessary financial, human, and social resources needed to create a new venture in the future. (e.g. participation to meetings with stakeholders, searching for possible partners, networking with possible investors).				
	Owning my own company energizes me.	-				
	Nurturing a new business through its emerging success is enjoyable.	Bringing up the business to emerging success (e.g. attending interesting workshops, asking for feedbacks, looking for new ideas, etc.).				
Identity centrality (Individual)	Being the founder of a	Being the founder of a business is an important part of who I am.				
Identity centrality (Team)	business is an important part of who I am.	My team considers important being the ones who founded a business.				
	Passion for developing the business					
Intense positive feeling	I really like finding the right people to market my product/service to.	-				
	Assembling the right people to work for my business is exciting.	Assembling the right people to work for the business (eg.scouting activities for hiring new developers or design experts, specialists with competences the firm lacks, etc.).				
	Pushing my employees and myself to make our company better motivates me.	Motivating your teammates and yourself to make the company better (e.g. helding meetings for asking opinions and motivating, being positive and cheerful,etc).				
Identity centrality (Individual)	Nurturing and growing	Nurturing and growing companies is an important part of who I am.				
Identity centrality (Team)	companies is an important part of who I am.	My team considers important developing and growing the company, even after the foundation.				

Source: own elaboration from Cardon, Gregoire, Stevens & Patel, 2013b

time Passion for Inventing Passion for Founding Passion for Developing 4,50 4,30 Satisfaction Rating (1-5) 4,10 3,90 3,70 3,50 3,30 3,10 2,90 Week 1 2 3 4 5 6 7 8 9 10 11 3,88 3,65 4,00 3,79 Passion for 4,00 3,83 4,14 3,67 4,39 4,18 4,21 (0,70)Inventing (0,54)(0,60)(0,66)(0,62)(0,87)(1,31)(1,40)(0,74)(0,68)(1,11)3,88 3,35 3,83 3,67 4,14 4,29 Passion for 3,58 4,07 4,29 3,94 4,00 Founding (0,47)(0,50)(0,47)(0,41)(0,52)(0,52)(0,65)(0,42)(0,45)(0,39)(0,53)3,89 Passion for 3,80 3,32 3,27 3,63 4,14 4,00 4,06 4,21 4,00 3,75 (0,64)(0,70)Developing (0,58)(0,62)(0,58)(0,65)(0,70)(0,93)(0,53)(0,72)(0,69)

Figure 4.4: Evolution of intense positive feeling for Entrepreneurial Passion domains

Entrepreneurial Passion Intense Positive Feeling over

Source: own elaboration from data collected from weekly questionnaires

Team Entrepreneurial Passion is a shared construct, which is disclosed by "asking individual team members what the team, overall, is passionate about and to what extent, independently of team members' identities or emotions" (Cardon, Post, & Forster, 2016, pg. 11). To explore the focus dimension of entrepreneurial passion at team level, individual members (co-founders and permanent members) were asked to state how important is each specific role or object for the team's identity, based on a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree" (question 7, 8, 9). This measure is intended to understand whether a mono-focal or a poly-focal Team Entrepreneurial Passion is developed.

By combining the replies of each team member to the above questions, we are able to identify whether individuals agree on the *team mono-focal or poly-focal entrepreneurial passion*.

Mono-focal TEP emerges when all individuals agree on the team having an unique focus: the rating 4 or 5 is provided only to one of the entrepreneurial domains. Poly-focal TEP emerges when all individuals rate with 4 or 5 more than one of the three domains. Response analysis has shown that different rates (1-5 scale) have been provided to each team identity centrality item (question 7, 8, 9), even though divergences were only on the intensity of agreement or disagreement ("agree-strongly agree" or "disagree-strongly disagree"). All startup members were coherent in defining whether the team was overall passionate or not for a specific entrepreneurial role. All startup members were found to consider the team passionate for more than one entrepreneurial role; by consequence, *all startup teams can be associated to a poly-focal TEP*.

ii) Interviews

The aim of interviews as qualitative data collection method is to look at our research topic (team entrepreneurial passion dynamics) from the interviewees perspective and to better understand behavioral drivers, focusing on specific sequences (King, 2004). Following Robert K. Yin (2006) suggestions, interviews took place especially according two forms: *in-depth interview and focused interview*.

It must be noted that interviews were *neither tape-recorded nor transcribed*; conversely, *notes* on the most relevant elements were taken during and after the conversation or meeting with the individual member, with every startup member consent. Moreover, some interviews were held with the presence of more than one team member.

In-depth interviews have an informal structure, aiming to discuss with team members topics related to individual and team role in the business venture progress, to in-group interactions and behaviours and to personal insights and opinions on acceleration program-related events, startup progress and interactions with other startups' team members. The interviewees are all *41 startup members*, regardless their role and their seniority: *co-founders, permanent members and temporary members* (trainees, consultants, experts). These interviews were held more *frequently* and for an extremely *short time*, ranging from 5 minutes to 20 mins. In-depth interviews have been carried out during *informal moments*, such as breakfast, lunch and dinner time, breaks, evenings spent in common areas.

Focused interviews were held only once at the midpoint of the acceleration program, during which specific questions on entrepreneurial passion focus and intensity were submitted to team members. These have been carried out in a conversational manner for a short period of time – usually half an hour – by following a structured question frame, even if they did not have specific limits. The interviewees are 22 co-founders and permanent team members of the startups, who have been involved in the acceleration program since its kick-off and who fulfill an essential role in the startup. This choice is due to the focus of the interview on elements which tend to have a relevant impact on the group culture. The objective of this type of interview is the collection of the interviewee's perspective on the entrepreneurial domain, on individual and team entrepreneurial passion elements, focusing the team member's attention on specific elements. Moreover, these interviews enabled the researcher to clarify the meaning of certain results from previous questionnaire and diary response. Interviewees were also asked specific questions related to their group development stage at the beginning of the program, following the self-report guidelines provided by Miller (2003).

iii) Informal interviews with participant-experts

External experts were informally interviewed on their interaction with the startup team, taking handwritten notes. External participants to the acceleration program observed every startup at a specific point in time or during the entire period, providing non-subjective feedbacks on business and team progresses and dynamics. As participants to the observed dynamics, they were interviewed in order to get their opinion on dynamics and elements observed within each startup, with a specific focus on time

processes, in-group dynamics and interactions with other startups and with the external environment. General insights on the startup ecosystem have often been discussed. External experts provide an objective feedback and perspective on studied startups, which tend to improve the *reliability of information collected*.

The role of participant-observer (not researcher) to the acceleration program has been performed by:

- i) External experts and mentors providing startups with seminars and dedicated coaching
- ii) Acceleration Program managers, providing teams with weekly feedbacks on the startup progress, planning and managing daily activities;
- iii) *Partner companies' managers*, providing the startup with tailored industry-related coaching and determinant feedbacks, and representing the potential investor.

A description of external temporary participants to the acceleration program is provided below (Table 4.4). Role and previous experiences of the accelerator team members are presented. Mentors are identified in terms of expertise area. Partner company managers are identified by role in the corporation.

Collected information aims to represent neutral, factual observations from an external perspective, where the observers are not personally involved with individuals and startups. However, these external actors participate to a moment of the acceleration program, thus directly and indirectly having an impact on the startup. External observers were personally interviewed by the researcher to obtain tailored information on each startup's progress and internal processes. Their opinions were often detected when providing feedbacks directly to the startup during one-to-one meetings, with the researcher's presence. Every meeting, formal and informal, every relevant conversation and event was observed and important statements or topics were written down after the interview, as suggested by previous researchers (Gersick, 1988). These include notes on informal verbal communications among team members and with other people, of indicators of the experienced feelings and of the level of effort applied to task execution (based on punctuality, attendance to workshops and meetings, participation), and of routines (for example, breakfast timing, physical activity sessions, seating patterns, locations, etc.). Observed elements by other accelerator team's members or external mentors were derived from documents internally available or by expressed opinions. This is applicable also to participant-observations. No audio recording was performed. Thanks to these informal interviews, *objective feedbacks* on startup's performance and progresses over time, on perceived quality of team processes, on team performance and on the ability to meet deadlines were obtained. Moreover, this method enables to gain external insights on startup's effort, on effectiveness of the startup's daily activity execution and a comparison with the general startup environment dynamics.

Table 4.4: Identification and professional role of external participants

Accelerator team	Mentors	Managers of Partner
7 toosiorator tourn	montoro	companies
Member 1: Accelerator program manager, involved also in	Mentor 1:	Manager 1: Corporate Business
many entrepreneurial and business projects, other than H-	Entrepreneurship	Development, main partner of
FARM. >10 years experience in startup environment.		Wellness Accelerator
Member 2: Wellness accelerator program manager, with a	Mentor 2: Lean	Manager 2: Industry network
previous experience as startupper. He left the program at	Business Model	manager, main partner of
end of June.		Wellness Accelerator.
Member 3: Fashion & Retail program manager assistant,	Mentor 3: Strategy	Manager 3: Key account
young graduate with no previous business background	0,	manager, main partner of
experience.		Wellness Accelerator
Member 4: support resource for running the acceleration	Mentor 4: Creative	Manager 4: Innovation
program daily activity and interacting with startups,	Design	manager, main partner of
economics and finance graduate	· ·	Fashion&Retail Accelerator.
Member 5: Operations manager, in charge of managing	Mentor 5:Growth	
accomodations and logistics, mentorships and budget,	Hacking	
previous experience as business consultant.	· ·	
Member 6: support resource for running the acceleration	Mentor 6: Social	
program daily activity and interacting with startups. Joined	Marketing	
the team in week 4, after graduation in management.	•	
Member 7: operations manager and temporary Wellness	Mentor 7: Community	
accelerator manager. Joined the team in week 11.	building	
Entrepreneur with previous experience as designer in		
multinational companies. No experience in the startup		
sector.		
Member 8: fundraising and networking manager for the	Mentor 8: Digital	
accelerator.	marketing and	
	Customer Acquisition	
Member 9: resource responsible for scouting activities. <5	Mentor 9: Technical	
years experience in the startup sector.	partner	
	Mentor 10: Business	
	development and	
	sharing economy expert	
	Mentor 11: expert in	
	consulting large	
	corporations and	
	startups in business	
	development,	
	innovation, leadership,	
	team development and	
Courses own	entrepreneurship.	

Source: own elaboration

iv) Participant – observations

Affective and identity processes are detected through direct observations of human behaviours, of the physical environment in which startups are embedded and of critical events occurring over the observation time period.

A team-level weekly narrative based on elements detected through observer's five senses have been completed by the researcher. Participant-observation is a data collection method in qualitative research, which is typified by the observer's moderate or active role within the context (Yin, 2006). It is an iterative process of tacit understanding, meanings and events. In the specific context of this study, my participant-observer role was of moderate involvement, characterized by a balanced combination of objective detachment as external observer and active involvement in the context of the phenomenon,

specifically the acceleration program (DeWalt, DeWalt, & Wayland, 2002). It has been carried out usually on a *longitudinal perspective*, as over time observations provide the researcher with deep and precise data on events, behaviours and cultural elements related to the individual team members, to the team and to community.

Our choice for the use of this method is driven by the need to obtain a comprehensive and integrated understanding of the phenomenon of TEP formation and influences, by the possibility of collecting observable and hidden information and of learning about affective and identity processes, in our specific case, by being directly exposed to startups' daily activities. In fact, this method enables to observe company norms and culture, body language and other behavioral and social elements, as suggested by Cassell & Symon (2009).

Data collection has been performed by actively participating to activities while searching for relevant information for the study, by carrying out informal interviews and by reporting notes on observations (DeWalt, et al., 2002; Kawulich, 2005).

The participant-observer role was performed by *myself, as a staff member of the Acceleration Program*. My role was to organize and manage the daily activities of the acceleration program, to provide startups with feedbacks and insights on their progresses, to organize mentorships and related activities, to be present to all team presentations and meetings. The informal social interactions occurring among people were observed by living in the same building as other startup members, sharing every daily moment such as meals, evenings, training sessions, leisure activities and entertaining, relaxed moments. I built friendly relationships with all members, which enabled me, as research, to better understand team dynamics and feelings experienced during the program.

Following detailed guidelines (DeWalt, et al., 2002), prior the start of the Acceleration Program, a thorough understanding of affective and identity processes identified by Cardon, Post & Forster (2016) has provided the participant-observer with an overview of behaviours, details or events to be observed. This specific data collection method enabled to witness the development of affective, identity and not previously identified processes, which impact on the development of TEP. Moreover, it has enabled the research to observe the startup's and the group's development over time, perceiving rhythm, velocity of processes and time impact on processes.

Observed behaviours were *handwritten* within a limited time frame. During the entire observational period, interactions occurring on-site have been object of deep analysis, especially involving in-group interactions, power structure, conflicts, in order to focus the collected data, to orient research and to start the interpretation and analysis of data, and eventually review the collection method.

Throughout the entire observation period, *continuous cross-checking with Professor Gianecchini* was performed, in order to avoid interpretations that may have occurred due to the judgement of the researcher and to have more than one source of information, thus enhancing the validity and reliability of collected data.

Interviews and participant-observations represent the data collection method mainly for affective and identity processes, together with group dynamics, as displayed below by Figure 4.5, and for the interception of other elements arising, which are not included in the theoretical model.

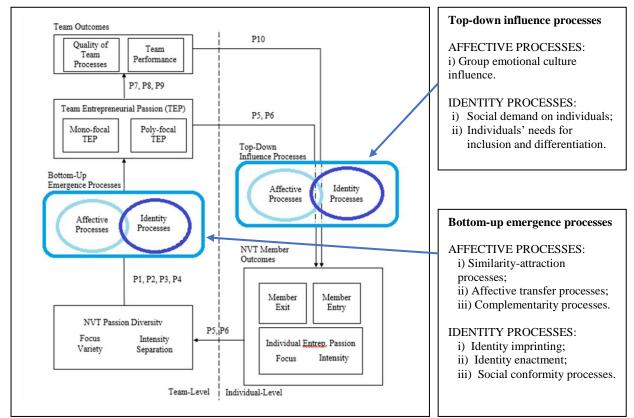


Figure 4.5 Theoretical mechanisms evaluated through observations of the Conceptual model of TEP

Source: own elaboration from Cardon, Post & Forster, 2016

v) Documents, Archival records and Critical Events

Even if there is a probability of bias or non-accurate information, one of the most rational and important data collection arises from official and/or formal documents, from archival records and from critical events (Yin, 2006).

Documents can be increasingly sourced in the Internet; however they must be managed carefully and not taken as granted. Generally speaking, documents refer to letters, email correspondence, personal documents such as diaries, calendars and notes, agendas, written reports of events, administrative records, formal studies and evaluations, news and articles in mass media tools. An extremely valuable result arises from the combination of personal observations and documentation.

An additional source of information is *archival documentation*, including public use files, such as statistical data, service and organizational records, maps and charts of specific geographic places, survey data. For our case study research, access to work-in-progress documents, updates and reviews is critical to understand the business development stage and to contextualize the affective and identity processes occurring within the team.

During the 3 months observation period, the researcher as participant-observer had the possibility to have access to and examine: up to 92 official documents, press archives, H-FARM and startup's websites and social channels (Twitter, Facebook, Linkedin, Instagram); confidential documents such as Business Model Canvas, pitch presentation reviews, communication kit, one page summary, product roadmap and specifics, customer experience, marketing plan, business and financial plan, metrics, contractual agreements; accelerator milestones plan; H-FARM event calendar and partially to startup's agendas. In addition, the confidential access to emails and informal communication channels (Slack, Whatsapp, Evernote) enabled us to contextualize occurring processes and behaviours within groups.

Thanks to public and confidential documents and to correspondence, it is possible for us to combine the *critical events timeline with temporary business milestones*, in order to obtain more information about specific behaviours and possibly formulate explanations for individual or team feelings and actions. Reproducing each startup event timeline enables the researcher to observe the *velocity of group processes* with respect to time deadlines and to follow the team and business development path.

High relevance for the research purpose arises from the critical events occurred during the 11 weeks of observation. All startups' members had access to an online calendar with scheduled meetings, workshops, other events and activities planned as part of the acceleration program. Moreover, the researcher had access to their individual professional meetings and partially to their personal commitments. The most relevant events can be synthetized in Appendix B. Each event is presented chronologically, being classified according to the related entrepreneurial passion domain involved (if present) and to the type of event. The latter distinction categorize events as:

- i) Entrepreneurial learning and mentoring, referred to workshops, seminars, activities related to the enhancement of entrepreneurial hard and soft skills. When tailored coaching is provided to each startup by the expert/instructor, such as one-to-one meetings with experts, the event is also classified as mentoring;
- ii) Feedbacks provided to each startup by influential individuals (accelerator team members and managers, partner company manager, potential investors) on the development stage and on the decision-making of each startup;
- *iii)* Networking with external stakeholders which involve the performance of pitch presentations to H-FARM influential visitors or to the accelerator's corporate partners and meetings with potential investors;
- *Social interactions related to team-building activities* organized by H-FARM or spontaneously developed by each startup, in professional and personal moments. It must be noted that startup internal critical events or activities are not described in the considered table (Appendix B).

In the table below (Table 4.5) a synthesis of critical events occurred and milestones to be achieved each week is presented, distinguishing among the different stages of the acceleration program.

Table 4.5: Critical events and milestones during the acceleration program. (Source: own elaboration)

11	S	_	os on ng and ng and lip on soling sol
Week 11	MARKETING & SALES	Marketing plan and strategy; Metrics	Workshops on data mining and community building; mentorship on entrepreneurial deep goals, community development and strategic path. Farewell party of participant-observer (myself)
Week 10	MARKETIN	Partner company visit meetings (only Wellness Accelerator); Business plan draft; Materials update.	Workshop on Workshops on Customer data mining an Acquisition, community Advertising, building; Social networks mentorship on and on legal entrepreneuria issues. community H-FARM development Summer Party; and strategic Partner path. Company visit Farewell party and meetings of participantwith managers observer (Wellness (myself)
Week 9		Product developm ent stage and roadmap; Marketing plan draft; Alpha/Bet a product release	Pitch to external visitors; Feedback meeting on product development
Week 8	ELOPMENT	Customer Experience and User Interface; Business Plan draft; meetings with partner company's mentor (only for Wellness Accelerator	Workshops on Mentorship on Product Design, growth hacking, User Experience and p and User Interface community building; (UX/UI); building; Kick-off of Technical Fashion & Retailpartner BBQ; acceleration program; Mentorship from partner Pitch company's presentation to managers influential (Wellness partners; accelerator). Feedback meetings.
Week 7	PRODUCT DEVELOPMENT	Pitch presentation to partner companies; Product roadmap; Communicati on kit Materials update	Workshops on Mentorship or Product Design, growth hacking User Experience and product Design, growth hacking entrepreneurs Experience and product Design, growth hacking; entrepreneurs by and Camunity building; Eashion & Retail partner BBQ; acceleration program; Mentorship from presentation to managers influential (Wellness partners; accelerator). Feedback meetings.
Week 6		Product development: Features and roadmap	Farewell party of accelerator team member 2; Workshop from Alumni startups; workshop on creative design and operational strategy, on marketing & communitcattion on KPIs and metrics. Feedback meetings.
Week 5		Strategic roadmap	European Accelerator Summit (EAS 2016); Workshop on Agile Project management.
Week 4		Business Model Canvas; Pitch Deck; Communicati on Kit; Landng page	Feedback meetings; Mentorship on business strategy; BMC and Pitch review. Exhilarant pitch presentation; Strategic consultancy and review;
Week 3	STRATEGY	Pitch Deck draft	Rimini Feedback Wellness meetings exhibition; Mentorsh Holiday break. business strategy; BMC and review. Exhilaral pitch presenta consulta and revii
Week 2		Business Model Canvas draft	BMC review; workshop on Pitch Presentation and entrepreneurshi p; Meeting with partner corporate managers.
Week 1		Team Building; Welcome	Accelerator kick-off; Welcome Kit; Whai Whai experience; Workshop on BMC; One-to-one meeting with Accelerator team
Week	Phase	Milestones	events events

4.3.3 The unit of analysis: early-stage startups teams

In qualitative research, a clear phase of data analysis should not be identifiable, as data collection and analysis are closely interconnected stages to be performed simultaneously. Doing so, the increasing amount of data collected is managed, while enabling a new formulation of the research problem and an adaptation of the collection process (Ghauri, 2004).

Given our research focus, the identification of an empirical setting that would enable us to directly observe group dynamics and collect a valuable set of information in a reasonable time frame was the main initial concern. An acceleration program typically lasts four months during which startups go through the four main business development stages: strategy and business modeling, product development and design, marketing and sales, fundraising.

Our observations have focused on the *first three months*, those which involve activities with a strong entrepreneurial focus and intensive learning activities. Thus, the observation of startups participating to the two ongoing acceleration programs in the *period from May to July 2016* may be considered a reasonable choice. In fact, an acceleration program is characterized by a *fast speed* in the unfolding of business activities relevant for the development of the new venture. In such high-pace, dynamic and uncertain context, new venture teams experience changes that they would commonly live in a longer time span.

Our unit of analysis is represented by startup teams participating to an acceleration program. However, we have the possibility to observe nine startup teams participating to the same acceleration program. Thus, our case study has *an unique unit of analysis with nine embedded units*.

The nine early-stage startups unit of analysis in our case study can be considered New Venture Teams (NVTs) with different industry focus and value proposition, at divergent development stages and from different countries. Prior the start of the data collection, the selection of teams object of analysis has been carefully conducted, in order to ensure the fit with the case study research domain and the possibility to collect a wide and homogeneous range of data on a time span of three months.

The definition of observed startups as "early-stage" is validated by the selection process performed by H-FARM for the acceleration program. In fact, only business ventures in the early-stages of development are selected during the screening phase.

As a researcher, I personally provided observed startups with detailed information on objectives of the case study research, following the procedure conducted by other researchers (see Gersick, 1988).

Startup team description

Startup teams covering the role of embedded unit of analysis of the case study research are described on the basis of nationality, business focus and team size (from secondary source information), of group development stage according to Tuckman's definition in 1965 (through the researchers personal

observations and interviews), of team entrepreneurial passion (based on questionnaires) and critical events occurred during the program.

The table below (Table 4.6) summarizes each team description, which will be then provided more in detail. The dimensions highlighted by the table are:

- i) The type of acceleration program attended: Each startup can be part of two different but simultaneous acceleration programs:
 - o the *Industry accelerator Fashion & Retail*, in partnership with a tech company;
 - o the *Wellness accelerator* powered by a large corporation in the Fitness & Wellness industry, which is also the main investor.²⁰
- ii) The *overall number of members* of each startup present in the time lag May-July 2016: it considers entries and exits of individuals providing temporary support (e.g. Internships) or specific consultancies (e.g. Topic expert visiting for 1 week). In *brackets* it is expressed the number of co-founders, both physically present in the accelerator or working remotely, and, if present, members involved full-time in the acceleration program of the startup. These information are derived both by the researcher observations and by internal documents recording.
- iii) The *countries of origin of startup members* are referred to the origin of co-founders and permanent team members. It is important to highlight the multiculturalism of teams participating to the acceleration programs. Cultural differences may have an impact on the observed processes, and these should be observed.
- iv) Team entrepreneurial passion in week 1 has been assessed by applying the method previously explained (paragraph 4.3.2.i). Startup 5 was assessed in week 5, as entered the program later,
- The *group development stage* is identified by following Miller's (2003) self-assessment retrospective guidelines, which have both qualitative and quantitative value. Team members were asked specific questions according to the self-report retrospective assessment during focused interviews, which integrated the participant-observations.

²⁰ H-FARM Accelerator: http://www.h-farm.com/en/investments/

Table 4.6 Classification of startups

Startup team	Accelerator	Number of members	Country of origin of startup members	Team entrepreneurial passion (week 1)	Group Development Stage at week 1
Team 1	Fashion & Retail	5 (2)	Denmark, Belarus	Poly-focal (for inventing and developing)	Forming
Team 2	Fitness & Wellness	7 (3)	Norway, UK, Italy, Germany/Vietnam	Poly-focal (for inventing and developing)	Norming
Team 3	Fitness	6 (3)	UK	Poly-focal (for inventing and developing)	Performing
Team 4	Fashion & Retail	4 (3)	Italy	Poly-focal (for inventing, founding and developing)	Storming
Team 5	Fashion & Retail	3 (2)	Italy	Poly-focal (for inventing , founding and developing)	Performing
Team 6	Fashion & Retail	3(2)	Portugal	Poly-focal (for inventing and developing; divergent consensus on passion for founding)	Storming
Team 7	Fitness & Wellness	6 (2)	Netherlands	Poly-focal (but divergent degree opinions among members)	Storming
Team 8	Fitness & Wellness	3 (2)	Italy, UK, Australia (all located in UK)	Poly-focal (inventing, founding, developing)	Performing
Team 9	Fashion & Retail	4 (3)	Italy	Poly-focal (inventing, founding and developing)	Norming

Source: own elaboration

A detailed description of each team part of the study is provided below.

Team 1 is formed by two co-founders, a male and a female on an age range 20-35 years old. They are from two different countries. The startup provides brands and e-commerce with an image-recognition technology, which enables them to match the product catalogue and list similar fashion styles, recommending the final customer specific outfits. During the first 3 months of the program, the team was characterized by the full-time presence of the two co-founders (Member 1 and 2), by the remote working of the developer (Member 3) and by the sporadic physical presence of two branding experts typically collaborating remotely (member 4 and 5). Over the following months, the team size increased, as during the first weeks of the acceleration program recruitment processes were started.

Even though the co-founders have been working together for 3 years, at the beginning of the acceleration program it was identified to be in the *Formng group development stage*, as member 2 was trying to understand the tasks to be personally accomplished and the team itself "did not have a clear definition of task responsibility division" (Team 1, member 2, week 6 focused interview).

During the first weeks of the Program, the team was challenged by the Business Model definition and, after an enlightening workshop, decided to change the value proposition. The group went through some frictions. However, the week after a group harmonious atmosphere was emerging and the team leader (member 1) enhanced the other co-founder's role in the startup, encouraging her to take a prior role in the business, for example pitching to investors or holding feedback meetings. The team was perceived

to work as an unique entity, driven by some common norms and being able to focus on tasks, reaching the *Performing group development stage*. Business achievements were reached in the latter stages of the acceleration program, obtaining extremely positive feedbacks and meeting influential managers. The co-founders created strong ties with many other startup members. The visit of two experts in week 8 provided strong motivation and enhanced the team enthusiasm.

Team 2 is formed by members from different nationalities, who are 18-30 years old. The startup provides people with personalized fitness programs by combining technology and training exercises, enhancing motivational and confidence elements of a person's psychology. Both co-founders are passionate of fitness and wellness. They cover different roles within the startup: member 1 is the leader and director of the startup, driving operations, while member 2 is focused on business strategy and funding, who initially was present only for a few days, while joining permanently the program from week 10. Member 3 is a developer with a permanent role in the startup. During the 3 months observation period various entries and exits from the team occurred: a student was hired for an internship in marketing, from week 1 to week 8 (member 4); member 5 is a developer trainee, who easily became part of the team from week 5; an UI/UX expert (member 6) provided the team with new enthusiasm and a different approach to specific elements of the business, such as customer experience and product design.

The team has started the program at a *Norming development stage*, as individuals were "feeling as being at home" (Team 2, member 2, focused interview). Each member had a business role in the startup and implicit group norms were developed. From week 3 on, tasks were clearly set among members and daily meetings were organized, reaching the *Performing stage*. The team started the recruitment process of new members since week 3. The team leader (member 1) organized a team building weekend in week 7, which improved team cohesion. In week 8, member 1 left H-FARM for a few days: the team kept performing and carrying out tasks under the guidance of member 2 who was present on-site. In week 8, the team released the Beta version of the app they were working on, celebrating and defining the following steps to be performed. Three new team members joined in week 11. In week 9 a professional photographer was hired to photoshoot in the Dolomites, in order to have professional pictures for the marketing campaign and for the app. Extremely positive feedbacks have been obtained by external experts. The company visit during week 10 has been extremely impactful for the progress of the startup, especially in terms of customer focus.

Team 3 is an English team composed by three young (25-30 years old) co-founders, who have been friends since a long period of time. Two of them were permanently on-site (member 1 and 2), while the other joined during important moments but mainly stayed in UK to network and to promote the startup offering, as he is a fitness industry expert (member 3). Member 1 is an experienced developer with previous entrepreneurial experience. He is the risk-taker and motivator. Member 2 is in charge of business-related elements and of networking; she is not the visionary entrepreneur of the business idea, but she has been able to achieve the co-founder status with her sales abilities. Since the arrival in H-

FARM the team has demonstrated to be extremely cohesive and have reached a *Performing group development stage*, as the focus was on startup tasks and challenges, rather than on group dynamics. This startup is developing a social app that puts in touch women who want to share training session. After four weeks from the program kick-off a permanent member in charge of marketing activities left because "he was not feeling aligned with the team and he had to finish some stuff at home" (Team 3, member 1, week 5 in-depth interview). In week 8 a team reunion was organized, and all team member arrived in H-FARM, in order to brainstorm on main initiatives and future steps, while clearly defining each others' role in the team. The marketing expert and fitness influencer (member 4) joined too. The energy and the enthusiasm of the team reached the highest peak level. Both co-founders were daily asking for feedbacks after each meeting or on a certain topic, in order to "improve every day and to understand whether or not we are on the right track" (Team 3, member 1, week 5 in-depth interview). In week 10 an Italian developer started an internship in the firm (member 5). After the end of the observation period, member 2 left the team for unknown reasons, probably because of personal conflicts with the co-founder. The role of CEO was transferred to member 4.

Team 4 is composed by Italian members, who cover different areas of expertise. They are developing a marketing platform to provide the consumer with a personal digital assistant. Three co-founder are permanently on-site. Member 1 is the only business expert, in charge of strategy, marketing and sales; he is the only member who pitches the startup to investors. Member 2 is a data scientist, getting involved in business topics to support member 1 as the program increased in intensity. The developer (member 3) focuses entirely on the development of the software and does not want to participate to business-related decisions. Other startup members know that "he doesn't want to be bothered with business stuff. So, we let him do what he is extremely good at: developing" (Member 3, week 2 in-depth interview). A permanent member (member 4) works remotely on the software development, while visiting H-FARM when required by the other members.

The team entered the program at *Storming stage of development*, as members were not perfectly aligned on business topics and they were experiencing some resistance towards the performance of specific tasks, as some members confided during informal conversations. After the BMC development, the team had a clearer idea of the business path, and a collective culture was developed, in addition to team cohesion. From week 6, each team member had specific tasks, attended related workshops and were working together as a team, thus at mid program, the team reached a *Performing stage*.

Team 5 is an Italian team developing an online platform to enable people to meet online the best indoor designer to furnish apartments. The team is formed by two co-founders (member 1 and 2) who have been working together since a long period and have built a strong friendship. The startup is the result of their desire to innovate their industry and become entrepreneurs. They are two women in a 30-40 age range. A permanent member (member 3) joined to fulfill tasks related to platform development; however he joined only randomly the team on-site, working remotely because of family commitments. The team

entered the program in week 5. It went through a stressful period because it had to work towards the milestones already achieved by other startups.

Task within the team were clearly defined and the team demonstrated to be "working towards finding solution to the startup's issues, having clear in mind what the final goal is" (Team 5, member 1, focused interview). Thus the team was already at a Performing stage when joined the program. Effort was increased when important potential clients had to be met or critical milestones were to be achieved.

Team 6 helps retailers and wholesalers in the beauty and make-up industry to increase sales and the customer retention rate, providing customized marketing. At arrival in H-FARM, the team was formed by three Portuguese co-founders (30-45 years old) who decided to innovate a fast-growing industry, becoming founders of an entrepreneurial venture. The team leader and business expert (Member 1) has been permanently present on-site, while member 2 had often worked remotely on the development of the software. The third co-founder (member 3) left the team after a few weeks from the start of the program, as he was not aligned anymore with the business mission. The initial stage of the program was characterized by the team being at the Storming development stage. In fact, this enhanced businessrelated difficulties. The team went through a difficult and frustrating period during the first weeks of the program, as they were not able to clearly define their Business Model. The group was experiencing some frictions; member 1 and 3 became hostile to each other. From week 5-6 the team had been able to "grow and improve the product and the business idea, while coming together as a team. I finally started to understand how to effectively interact with member 2" (Team 6, member 1, week 6 focused interview). Thus, the team was able to grow up to a *Performing development stage*. Both team members showed to strongly value leisure time and social interactions, helping other members in overcoming difficulties. From week 10 the team showed to work as a team, as confirmed by *Mentor 7*.

Team 7 has been developing a platform to help business travelers to stay fit during their trips. The team is formed by two Dutch people with different ages (25-55 years old). Member 1 is the founder and the one who had the business idea. He is the startup leader, both because of his older age and because of him being a visionary entrepreneur. Member 2 is the team developer and he has been providing the leader with his opinion on many elements, strongly influencing the business path. He joined the team as worker, but then assumed the role of co-founder.

At first arrival, the team was observed to likely be in the *Storming development stage*, even though by the end of the acceleration program, *Performing stage was reached*. The startup went through a difficult moment in week 7, when it had been working on brand development and on the definition of the team's identity together with a branding expert (*member 3*), despite external suggestions to focus on product development. The team experienced frictions until a new name was found for the business venture. In addition to *member 3*, also the strategy and business plan expert (*member 4*) was present in H-FARM only for one week. From week 8 the team started identifying with the group and not only with the startup, while becoming comfortable with each other, "*adopting an unified approach to task performance and*

focusing on business-related issues" (Team 7, member 1, focused interview). The team hired two trainees to provide help in developing the platform (member 5) and develop a marketing campaign (member 6). These enhanced the positive atmosphere within the team, as they enabled co-founders to focus on strategic issues rather than on manual activities and their young age brought enthusiasm within the team.

Team 8 is composed by individuals who have been working on various entrepreneurial ideas together. All members are in the age range 35-50 years old, thus being very experienced and serious entrepreneurs. The team joined the acceleration program to focus full-time on the development of their business idea, a platform for gyms to improve users retention rate, service standards and revenues through feedbacks and certifications of personal trainers. This startup is the result of their desire to found a business venture and to pursue their passion for fitness. The three co-founders have extremely different backgrounds. Member 1 is an experienced developer, who was present on-site throughout the entire observation period. He is an extremely positive and cheerful person, keeping high enthusiasm among all startups. Member 2 is in charge of business-related tasks and he was present only one day per week. Member 3 is an expert of the fitness industry, providing the startup with technical know-how; he visited the team only twice for a short period of time. Four developers were working remotely on the startup's technology (member 4, 5, 6, 7), while one member was the ambassador of the startup in the fitness industry (member 8). Member 1 worked alone most of the time, but when the other co-founders joined H-CAMP, enthusiasm and team performance reached high levels. Member 1 has been interacting with other members on a daily basis, working remotely. Meetings with experts were scheduled in order to enable member 2's remote participation.

The team entered the program at a *Performing group development stage*, as "we are a team, or better, a family, sharing the business vision and values, trusting each other, and focusing on task achievement" (Team 8, member 1, focused interview).

Team 9 leads an Italian startup which provides small retailers with a platform to enable them to understand how to achieve digital transformation in the most effective and efficient way. The team is formed by individuals with different ages (25-40 years old). It is currently formed by two co-founders (member 1 and 2), who are developers, and a permanent member who joined the team in week 2 (member 3) as business expert. The third co-founder (member 4) left the team in June. The co-founders are long-term friends who have been working on various digital software platforms in the past. The team was present on-site four days a week, even though there was often only one member.

As co-founders are friends, when starting the acceleration program, they had already developed collective standards of interaction, being comfortable in exchanging points of views. Thus, the team was experiencing the *Norming stage* when first entered the program. The transference of the group norms to the permanent member has been quite quick and easy.

After living together for many weeks, sharing various non-business moments and overcoming the member 4 exit, the team *became "more conscious of our team strength. Now we know that we must focus on business development and not on anything else" (Team 9, member 3, focused interview)*, thus becoming a performing group focusing on business development. According to experts' feedbacks, the team was slightly behind in business development because they reached a group balance after a few weeks from the start of the acceleration program.

4.4 Data analysis

4.4.1 Bottom-up processes: Team Entrepreneurial Passion emergence

Cardon's conceptual model proposes that processes of similarity-attraction, of affective transfer and of identity imprinting, enactment and conformity, occurring among individuals with similar entrepreneurial passion focus, tend to support the development in a new venture of a mono-focal team entrepreneurial passion. Poly-focal entrepreneurial passion is proposed to emerge when complementarity in passion focus are perceived.

Affective processes: Similarity-attraction processes

Startups selection to participate to the acceleration program is based on various elements, including team composition and affinity degree among individual members. The *initial evaluation of teams* during the Open-Day is based on external perceptions. The *positive atmosphere* surrounding a team during the open-day event spent in H-FARM, the level of *conformity in behaviours, in body movements and in adapting and exploring a new environment* are observed by evaluators, as these are expressions of team cohesion, which is generally experienced by homogeneous groups. *Team 3* was represented at the open day by the two co-founders, which demonstrated a *strong synergy* among them, *similar and coherent behaviours* when interacting among them and with other people. They were both expressing high levels of enthusiasm and joy, a very positive attitude towards new people and strong pride when describing their business venture. These external perceptions represent the result of *affective transfer processes developed over time, in particular of interaction synchrony*.

The mimicking of hands gestures, of voice speed and volume, and of decisions of how to spend the free time available are elements which enhance the accelerator's team perception of a team entrepreneurial passion. Perceived entrepreneurial passion at team level has been used by evaluators to define the perceived similarity among team members. Startup 3 has been selected by evaluators to participate to the acceleration program mainly because of the team cohesion and balance, as this is a security of cultural and goal alignment, strong motivation, energy and effectiveness.

In retrospect, this team is *homogeneous* in terms of business goal alignment, approach to job execution and type of emotional states typically experienced (positive or negative). However, team members have different personalities and different extents of emotional feelings expressions. *Similarity-attraction processes* were observed over time in all teams. However, the in-depth and focused interviews with startup members confirmed the observer perception that individuals were *attracted to join teams* of people when sharing common interests, passions, goals, values and ways of conducting daily life. *Similarity in personality* was not perceived in most of the teams. As two co-founders admitted:

"we are two extremely opposite personalities, but we are very similar under some perspectives. For example, we are both hard workers, but we like enjoying life. We have independently founded many startups in the past, but our own motivation has always been to develop something from scratch, to give people what they need. The startup must be enthusiasm-driven, not seen as a full-time office job."

(Team 3, member 1 and 2, in-depth interview)

In these affirmations alignment in passion for inventing and developing emerges, confirmed by both members' replies to the questionnaire, where both member experience the same degree of identity centrality of the inventing and developing role ("strongly agree") (*Team 3, member 1 and 2, week 2 questionnaire*).

The entrepreneurial passion focus and the type of affective feeling experienced are the elements used by team members to judge their similarity with others. An expert of growth hacking affirmed that:

"when discussing with teams about their startup, all founders agreed on the importance of being passionate for the startup business idea of the team members. If members of a team do not have the same goal alignment, the same intense desire for growing the startup or for realizing innovative solutions to problems, they won't last long in the team. Startups must be effective, dynamic, cohesive, and this is possible only if all members are similar in what they are passionate for or if they complete each other. This does not means that they must always be passionate for the same things, but they always have to share a common interest and, if there are strong differences in passion focus, even though complementary, individuals must be willing to accept differences."

(Mentor 5, week 8, in-depth interview)

Similarity-attraction occurs also in *heterogeneous groups*. However, when members are less flexible and differences in passion domains or values are extreme, teams may develop a group emotion because members may feel to complement each other. This partially confirms the development of a collective group passion among individuals with different passion focus, only if team members are similar or complementary. *Poly-focal TEP* is likely to emerge because of both similarity-attraction and *complementary-attraction processes* (Cardon, Post, & Forster, 2016). Complementary diversities lead individuals to be attracted one another. All teams participating to the current study expressed passion for multiple foci both at individual and team level.

Team 8 is formed by co-founders with extremely different backgrounds, who share the same passion for fitness and wellness. When asked the reasoning of team composition, the team leader and co-founder affirmed that:

"I have a strong software development background, but I have never thought about customer, marketing, business model. Member 2 is the one who takes care of that. Member 3 provides our company with industry expertise. However, our experience in this acceleration program made me understand that if you have the best technology, but you don't know who your customer is, well, your technology has no value" (Team 8, member 1, in-depth interview).

Teams develop a group emotion when members share at *least at a moderate level a common interest*, even if experiencing strong differences on other affective elements or in relation to personality. Cofounders have different personalities and approaches to business, but at team level they may be able to complement and balance each other.

"I am the "idea leader". I strongly believe in the value of trials and failures before reaching success. I focus on the development of the product. My co-founder is more rational, she considers the business context and the relationships with people. We balance each other. However, we believe in this startup.

We have the same business goal, even if we have different personal objectives."

(Team 3, member 1, in-depth interview).

Implicit affective processes

According to theory, group emotions, thus team entrepreneurial passion, result from explicit and implicit affective processes, which impact on group dynamics. These include *emotional contagion*, *vicarious affective learning*, *behavioral entrainment processes leading to interaction synchrony*.

The researcher's observation of every team for three months has enabled to oversee the *changes in emotional contagion* overtime. Observations were based on *facial, vocal and postural mimicry and synchrony* (Hatfield, Cacioppo, & Rapson, 1994). *Team 2* co-founders were not present at the acceleration program kick-off. It was the permanent team member (*member 3*) who held the first meeting with the accelerator team and he participated to the first activities. He was not very comfortable, outgoing and smiling, he chose the most hidden position at the work desk, he was perceived by everyone as shy, passive and not very self-confident. However, when the co-founder and team leader joined the program (*member 1*), a new positive atmosphere was surrounding the team, as he was frequently smiling, meeting startups' members and other people working in H-FARM. After the leader's arrival, *member 3* spent the first day *looking at the leader's behaviours* when interacting with other startups' individuals, when having lunches and dinners, when working in the open-space desk. The following days he was smiling to people when arriving in the morning, showing enjoyment when the accelerator team interacted with him, speaking louder as to express energy and sitting tighter. In the following weeks, team member 3 acquired *more self-confidence* and certain *behaviours were synchronized* among member 1 and 3.

Vicarious learning has been observed at team level when a member was experiencing a new role. Initially, only member 1, as co-founder, did the brief presentation of the business venture. However, during week 2 he worked together with member 3 to prepare him for the pitch presentation, as he has been part of the team for a longer period. Member 3 experienced positive feelings in "getting out of the comfort-zone a bit during pitch practice" (Team 2, Member 3, week 2 diary). Thanks to previous direct observation of the pitch practices, implicit trials to mimic the leader's body movement and gestures, the voice tone and facial expressions were enacted by member 3 when having to pitch himself, in order "to feel appropriate and to be sure not to ruin the pitch" (Team 2, member 3, week 2 in-depth interview). As emotional contagion is defined as the sum of emotional mimicry and social comparison (Cardon, 2008), this is a clear example of mimicry of expressions, vocalizations, postures and movements when member 3 is facing a similar situation as the one faced by the entrepreneur (member 1).

In the following weeks member 3 expressed *increasing importance of developing and founding the business' domains*. A higher amount of time was spent in performing related activities, such as attending workshops on strategy development, networking with potential investors, asking for feedbacks on the startup's progress to the accelerator team. In fact, the acceleration program manager told the *partner corporate manager 1*:

"it is impressive how much the leader of team 2 has involved member 3 and 4 in the development of the Business Model Canvas, asking their personal opinions and telling them how important was their view point to him" (Accelerator team member 2, week 4 informal interview).

The team leaders were often observed to *motivate the other co-founders or permanent members* to present the business pitch, to overcome fears and uncertainties. This is an expression of trust, which strongly increases the level of team trust and cohesion.

"Now I feel completely involved in the business vision now, I feel I am passionate about being an entrepreneur. I feel as this startup is part of me" (Team 1, member 2, week 6 focused interview).

The involvement in the strategic decisional process has led, for example member 3 and 4 of team 2 or team 1 member 2, to experience the so-called vicarious affective learning. In fact, both members continuously observe how their team leader behaves when participating to workshops, when carrying out his daily work, when attending meetings. They both tend to behave accordingly. As time flows, behaviours among team members appear to synchronize and increase in coordination.

As time flows, behaviours among team members appear to *synchronize and increase in coordination*. *Behavioral entrainment and synchronization* was observed mainly after a few weeks after the beginning of the acceleration program.

"What I've noticed thanks to my long experience as a serial entrepreneur is that team members tend to adapt their behaviours to the common approaches, feelings and reactions of the team, even if they are not coherent with theirs. The flow of time and continuous personal interactions help people to adjust and synchronize with other. For this reason, working remotely impedes the development of a deeply shared culture. However, if a team member does not adjust his behaviour to the team's one, he will leave." (Team 5, member 1, week 6 focused interview).

This expression confirms the conceptual model's proposition of *affective contagion in teams as a multi*step process, driven mainly by the leader or by influential members. Empirical confirmation is provided by team members with different passion focus intensities, which are driven by the leader to positively approach to different business areas, for example a developer may partially change his focus, moving from passion for inventing to passion for founding. An example is provided by the development of the Business Model Canvas (BMC), occurred especially during the second week of the acceleration program.

"The creation and refinement of the BMC challenged us together as a team"

(Team 2, member 1, week 3 in-depth interview).

Explicit affective processes

In addition to the conceptual model of TEP, the *non-affective context and the explicit and intentional affective induction* are taken into consideration.

Explicit processes of *affective induction and influence* were observed in both personal life daily activities and in entrepreneurship-related ones. The *manipulation of affect* is the result of the *charisma* expressed by the team leader (for example, *team 2, member 1*).

A few days after member 1 arrival in H-FARM, a new intern joined *Team 2 (member 4)*. The *role of the leader* immediately emerged, as he intentionally tried to *induce team members to experience the same positive feeling*, the same enthusiasm, to share goals and ways-of-doing. For example, member 1 decided to use bicycles rather than a rental car for daily transfers and he communicated it to the other members as a great opportunity. Even if member 4 would have preferred a more comfortable solution, she felt to *display enthusiasm for the choice*, in order to show the team leader *appropriateness to the group*.

The leader's perception in front of such behaviour from a trainee was that:

"we are coming together as a team." (Team 2, Member 1, week 2 diary).

Another example of affective induction is provided by *team 3*. During the first meeting with the accelerator team after his arrival in week 2, *member 1* of team 3 showed high enthusiasm when presenting his startup, enhancing the team goal to "scale up quickly". This represents the reason why they are assembling the *best team*, which is an expression of the passion for developing. However, when discussing about the internal team dynamics, *member 2* explains how the other co-founder is "the charismatic, risk-taker and idea generator person, always trying to drive the team to take risks in order to grow quickly" (team 3, member 2, week 3 in-depth interview).

The development of the business model for *team 2* required the participation of member 1 and member 3 on site, while the other co-founder (member 2) was interacting remotely. Member 3 is a developer, who had expressed no interest in business strategy up to that moment. His involvement and the positive approach of the team leader in discussing all elements of it and in explicitly involving member 3 have made him experience positive feelings and curiosity in relation to the performance of activities not related to software development, describing the week as "refreshing, surprising, hard" (Team 2, Member 3, week 2 diary). In week 2, according to responses to the questionnaire of member 3, he spent

most of his time searching for innovative solutions and new ideas to improve the customer value proposition (20%) and in bringing up the business to emerging success (20%). In the previous week he spent most of his time working on the Alpha version of the new App, his core job. He considered *the inventing role as the central identity role*, while the founding and developing domain is less relevant to him, though still important (*Team 2, member 3, week 1 diary*). After being included in the development of the BMC and other business-related activities, more relevance was observed to be given to the founding and developing entrepreneurial role and experiencing satisfaction for the performance of such roles (*Team 2, member 2, week 2 diary*).

Non-affective elements

In addition to Cardon's model, it is worth considering *H-FARM environment*. As highlighted in Chapter 2, non-affective elements, such as *intergroup context*, *physical environment*, *technological conditions* and *external events*, have an impact on the emergence of positive feelings and on group dynamics.

The physical environment

H-FARM physical location has been built in an old farmhouse, which has been expanding since the beginning. It is located in Ca' Tron di Roncade, a remote area in the Venetian area. Facilities can be reached only by car or other means of transport. Open-offices, a welcoming common area where to eat, to build relationships and to develop great ideas, called *La Serra*, green space spaces in the surrounding, young and inspiring environment: these are the main elements of the atypical H-FARM are.

Many accelerator leaders participating to the European Accelerator Summit 2016 have defined it as *the most inspiring place where a startup could be*, when interviewed by myself.

Every startup team participating to the acceleration program is provided with room and board. The accommodation is provided in two buildings. So, all startups teams live in close buildings and they share common areas. Breakfast, lunch and dinner are provided in the Serra, where team members from different startups share moments together, building strong friendship relationships and discussing of both business and non-business topics.

This environment has been described as "a great, positive atmosphere to work in, mainly because of H-FARM's very welcoming physical context" (Team 8, member 2, week 2 diary).

The physical environment has an extremely relevant role on the success of new ventures and on positive in-group dynamics, as explained by *mentor 5*:

I have worked with startups in many different countries and I have provided mentorships in different startup accelerators. This enabled me to make comparisons. I have noticed the determinant value of the physical environment for the success of startups. A welcoming work space encourages relationships, it leads to more harmonious intra-groups interactions, it enhances creativity and it keeps low the stress level. Positive feelings tend to arise in such context.

Being located in such an isolated area (i.e. Ca' Tron di Roncade) as H-FARM is extremely positive for the startup success, as the new venture is 100% focused on the tasks to be carried out. However, it

may lead teams to lose the contact with reality and to spend much effort on carrying out daily activities because of the lack of facilities in a comfortable location." (Mentor 5, week 8 interview)

The physical environment is extremely relevant for the startup as both a team and a business venture. This role is explained by a startup member, who considers it as

"extremely important for our business development, because distractions arising from the external environment, for example parties, events, family and friends meetings, which occur in larger cities or when close to home, are reduced or null. Moreover, team members are pushed to collaborate and help each other in running daily activities, fostering the development of strong relationships both with your team members and with other startups. Unhealthy competition is not part of this context.

In such location we are able, as a team, to focus not only on the business but also on building closer relationships among each other, on developing our team culture and on enhancing a positive in-group atmosphere.

However, being here is sometimes stressful, as everything is reachable by car or by bike and team members risk to loose contact with reality and you sometimes feel the need to have your own private space" (Team 6, member 1, week 4 in-depth interview).

Daily activities distract startup members from their unique focus: developing their business idea in order to reach the market and become a successful venture. Thus, the participation to an acceleration program in H-Farm, which enables startups avoid to have to deal with daily routines and activities, fosters an efficient and effective business development:

"dealing with logistics, food and housekeeping prevents us from focusing on important business activities and increases tension among team members who have different approaches on running daily activities" (Team 7, member 1, week 3 diary).

A business-friendly environment and a stimulating context enhance the development of a team entrepreneurial passion:

"without H-FARM environment it would be much harder to develop a team culture. Here you have other pairs to get opinions, suggestions, share insights. It is a stimulating environment (workshops, mentors, etc). It makes people focus on the business and on growing as a team, while considering new perspectives. In this location, as a team we have understood what is really important to us."

(Team 8, member 2, week 7 focused interview).

Computer-mediated groups strongly impact on the development of a shared collective emotion, such as entrepreneurial passion. All startups observed experienced situations in which members had to interact with the group present in H-FARM by working remotely. The *lack of face-to-face interactions* among members limited the arousal of implicit affective behaviours or expressions, as previously described. This led to a *negative impact on the team affective development*. The arrival on site of co-founders or other team members have always increased the level of energy, positive feelings, motivation and

confidence of the team. This is confirmed by a startup member who was present in H-FARM alone most of the time:

"Even if only for one day, the arrival of my team mate made the much more productive" (Team 8, member 1, week 2 diary).

The importance of *face-to-face interactions and of team building activities* is observed mainly during intense phases of the acceleration program. Startups which resulted to be more effective in achieving temporary milestones were observed to be the teams which spent more effort on team building and on organizing periodic face-to-face meetings, joined by members working remotely. The organization of team reunions at mid-program to set the roadmap and clarify every member's tasks and goals have a strong positive impact on both the level of cohesiveness and performance of the group:

"Having here all the team has made things much better, things move on quicker, brainstorming is more effective and creative. Nothing can beat face-to-face team interactions"

(Team 3, member 1, week 10 in-depth interview).

Working remotely keeps team members detached from the experience of collective passions. Both *team* 2 and *team* 3 organized a team reunion, respectively for two days and for one week, to "have all members know each other, spend time together, share opinions and get closer" (team 2, member 1, week 8, indepth interview) and to "develop and share the startup culture, so everyone is aligned with the startup's goals and values." (Team 3, member 1, week 8, diary).

Difficulties in team dynamics and group interactions negatively may impact on performance:

"This week there was not much interaction with my team mates which slowed things down" (Team 8, member 1, week 11 diary).

Moreover, lack of frequent face-to-face interactions may negatively impact on the team mood, leading physically present team members to feel disoriented and to not work efficiently, losing time:

"I am not able to develop the Business Model Canvas as I feel to grope in the dark, without points of reference" (Team 8, member 1, week 3 in-depth interview).

Identity processes

Identity processes are observed to be extremely relevant for the development of a common team culture and entrepreneurial passion.

Starting from previous identity-related empirical research (Kroezen & Heugens, 2012), *identity imprinting and enactment processes* have been observed over time.

The development of the BMC has strongly challenged all teams. At the first meeting with the accelerator team to review it, some teams had a clear overview of the elements forming their business, which was coherent with the business idea presented when applying for the acceleration program. Teams at a more advanced development stage (e.g. Norming and performing stage) were observed to have a more clear overview of the BMC, developing an initial version which has then been slightly modified and adjusted according to external feedbacks (from the accelerator team, mentors and managers).

Other teams developed different versions of the framework, often revolutionizing it. Initially, they discussed a non-focused business model with contradictory elements. These teams were explicitly told by the accelerator program manager to:

"understand who you want to be as a business. You must have clear in mind what are the values driving your choices, what is your vision" (Accelerator team member 1, week 2 meeting).

Most difficulties emerged in the Value Proposition area, mainly because:

The focus must be on the "startup's core values, and how these address the customer needs" (Accelerator team member 2, week 3 one-to-one meeting with startup 7).

A clear *Business Model Canvas is a critical milestone* for every startup, as the definition of strategy is the basis for success. It could be considered as the *statement of the organizational identity*.

Feedbacks from the external environment had strong impacts on each team's choices, as each startup was aiming to obtain legitimation from experts and influent stakeholders:

"external feedbacks are extremely relevant to us. They enable us to correct our mistakes, to improve on a daily basis and to achieve faster and stronger success. Moreover, they provide the team with new perspectives" (Team 3, member 1, week 5 in-depth interview)

The most relevant feedbacks were those provided by the entire acceleration program manager (accelerator team member 1) and by the managers from partners and potential investors (partner company manager 1-4). The need of startup teams for external legitimacy was observed during informal meetings with the accelerator program managers (Acceleration team members 1, 2, 3), when all team leaders were asking:

"what should we include in our business to be more attractive to potential investors?"

Team cohesion and cooperation is essential during this phase. All member's involvement is essential when developing the collective identity:

"all co-founders should be present and involved when focusing on strategy, it is the moment when the startup must be a priority, as core, distinctive and lasting values are chosen"

(Mentor 3 written feedback to Team 2, week 4)

Organizational identity *changes over time*, because of external dynamics. To better understand their core identity, *team 7* worked for more than one week with a branding expert. They have developed a clear *vision and mission statement*, expressing the values which are driving their business. Both co-founders were extremely focused, losing sight of the product development deliverables to be met during those weeks. The creation of a *branding guide* has positively impacted on their *motivation and commitment* to goal achievement; however anxiety and frustration arose because of the inability to find the new name to give to the startup. The co-founder defined that week as "*intense*, *emotional and frustrating*" (*Team 7, member 1, week 7*). A strong verbal conflict occurred among the co-founders as *stress peaked*. The

visionary entrepreneur did not want to accept to maintain the old company name, after having developed the new brand guide.

"This startup is part of me. And I don't identify with that name anymore! We have to change it!"

(Team 7, member 1, in-depth interview).

When the new company name was chosen, harmonious feelings surrounded the team and a celebration moment was organized with the other startups to share the event, an important milestone for the business venture. The branding guide reflects the *entrepreneurial focus of both co-founders*, which is for inventing solutions to customer needs and developing the business. However, member 1 experiences a strong founder entrepreneurial passion. In fact, their brand story states "we started this business to create a smart solution for our target customer [...] and we have just begun" (Team 7, internal document). In that moment many positive feelings aroused among the co-founders, reducing the level of conflict.

Organization identity imprinting is the result of individual identities, shaped by external feedbacks and events. The formulation of the startup vision, which drives their decisions, was observed as an additional critical moment, in which the startup team members were observed to imprint their individual identity in the collective one. Businesses deliberately declare their identity in the vision, often stated in their pitch presentation or in the business. New venture teams tend to identify with the organization, and transfer their entrepreneurial focus in it. By consequence, it can be considered suitable to consider business values as the outcome the team values, goals and beliefs. The customer-centric view of most of the observed startups may be associated to the expression of the team intense positive feeling for inventing and developing, as the product/service offer is continuously improved in order to meet the user's needs. The choice to hire a user experience expert (Team 2, member 6), who joined the team in week 8, was the result of the team focusing on the development of the product in a customer perspective. In fact, team 2 passion for developing the product was stated by its co-founder telling a mentor during an informal conversation:

"we must improve the quality of our product, and to do so we must focus on our customer. We need someone extremely expert on this." (team 2, member 1, week 4 in-depth interview).

Team and organizational identity changes over time, and when such event occurs, anxiety and irritability feelings tend to emerge. Tensions arise among team members. However, the team leader is usually the driving force in the change phase and team members and co-founders tend to adapt.

If members feel completely dis-aligned with the startup's values, culture and vision, they leave:

"The choice to change was somehow an agreed decision. However I am nervous. But I trust my co-founder" (Team 1, member 2, week 4 in-depth interview).

Internal disagreements or conflicts are likely to arise, when taking identity-related decisions. However, after discussing the different viewpoints, the *leader's opinion* tends to prevail "because he is the first

visionaire, he is the one with the charisma to embody the passion for our startup" (Team 7, member 2, week 8 in-depth interview).

An example of *identity enactment* of the team entrepreneurial passion for developing the business is the meeting held by team 2 after the release of the Beta version of the product. The team celebrated the event and the leader motivated all other members to achieve the next steps. The decision to hire an expert storyteller to develop the customer experience represented an expression of passion for developing the business:

"We hired a great storyteller, to help us develop the experienced offered to the customer. Our startup team is about great people." (Team 1, member 1, week 8 in-depth interview).

Social conformity processes may occur, when individual team members tend to conform to the team's behaviours and attitudes, as they feel part of the organization. This may lead individuals to shift part of their attention to different tasks or to perform different activities:

"I had to learn new software technologies, even if I am not a developer, in order to search for new product features of our product, which is so important for our team. It was a great success for me" (Team 6, member 1, week 10 in-depth interview).

It may occur that certain members do not identify in the team identity and they do not intend to deviate from their typical behaviours, attitudes or values. An example is provided by *member 3 team 4* who focuses on product development and does not want to adapt to the team's needs and perform tasks related to other entrepreneurial roles relevant for the team (for example performance measure analysis, hiring people, etc.). However, the team is aware of such and do not pretend him to conform (*Team 4, member 2, week 7*). In fact, other startup members know that "he doesn't want to be bothered with business stuff."

So, we let him do what he is extremely good at: developing" (Member 3, week 2 in-depth interview).

Individuals' entrepreneurial passion and the *diversity* among members of the same team *shaped the formation of the team-level one*. However, by observing startups, the collective group emotion was noticed to more likely reflect the leader's entrepreneurial passion focus. Thus, we can observe the team leader role in influencing the foci of TEP. A team leader and startup co-founder considers that:

"The leader is the one who sets the passion/focus of the group, unless the group has a shared passion. My other co-founder's goals are to develop innovative things and develop the business. I share these with him, but, in addition, I consider extremely important to be the founder of the company too. That's why I've founded different companies in the past." (Team 6, member 1, week 6 focused interview).

4.4.2 Top-down processes: Team Entrepreneurial Passion influence

Team entrepreneurial passion over time affects the individual passion and both individual and team outcomes. Individuals may change the intensity of their passion or modify/integrate the focus of the positive affective feeling.

Entry and exit choices

The most relevant effect of TEP on individual outcomes is related to entry and exit choices of team members.

Exit choices

Especially when the team is developing TEP and a shared identity, team members are more likely to exit because of non-alignment feelings. We have observed members leaving a startup mainly because they did not share the same intense positive feeling towards the business venture. They were perceived to experience a lower intensity towards the business activity, even if having a similar focus. A cofounder of *team 6*, who was present during the first weeks of the acceleration program, left the team after week 4. The explanation of such decision, as provided by the other co-founder, was that "this startup was not his main focus anymore." (Team 6, member 1, week 5 in-depth interview).

Exit choices may also occur when members disagree on the team entrepreneurial passion and collective culture developed, thus on TEP focus divergence

In week 5 another intern for software development, who was previously working remotely, arrived in H-FARM. However, he exit the team after two days. The reasoning of this exit was "the non-alignment with our team goals and with our way of working" (Team 2, member 1, week 7 focused interview).

Entry choices

Team entrepreneurial passion is observed to more likely influence individuals' *entry choices* at later stages of development of the business venture, when a shared culture, a collective identity and emotion is more likely to be developed. Alignment with collective values and culture is taken into consideration by team leaders when managing the hiring process and by the potential new team member when deciding whether to accept the job offer or not. Examples of the impact of collective culture and TEP on entry choices is provided by the hiring process of team 7 and team 8.

Though the team had been working together for a long period, because of remote working, no clearly defined identity and shared culture was yet developed when the hiring process of a marketing resource was started. In such context, collective culture was not observed to be a determinant element influencing entry choices. The job advert stated:

"we are looking for a marketing person to help us develop the platform, able to carry out tasks required [...]" (Team 8, internal document, week 7).

Conversely, a team with a clear team culture issued a job advert, which was taking into consideration emotional elements. It stated:

"we are looking for a motivated, enthusiastic and organizational superstar, fluent in English, finalizing the studies in event management. You must share our vision, be passionate for finding the best solution to our customers in the wellness-travel industry." (Team 7, internal document, week 7).

An additional member in the team, especially when providing *complementary skills*, was always observed to generate new, intense positive feelings in the group. For example, the arrival of two trainees for software development in week 5, who was previously working remotely (member 5) and of a customer-user experience expert in week 8 (*member 6*) improved the *harmonious atmosphere* of the team, which displayed more enthusiasm and energy in carrying out business tasks and attending the accelerator program activities.

Additionally, temporary physical entries of co-founders or members in the team, who usually work remotely, have been observed to be extremely relevant for both TEP development and affective feelings experienced within the group are also. In week 8, *team 2* was experiencing an extremely positive time as the other co-founder (*member 2*) arrived. The team leader described the other co-founder arrival in H-FARM for a few days saying that:

"The arrival of my co-founder has brought enthusiasm, excitement and happiness in the team. Now that my other team leader joined, I feel 'complete' and I have a new energy to achieve higher goals" (Team 2, member 1, week 8 diary).

Social demand on individuals

Team entrepreneurial passion influences individual members, as it leads them to modify their passion focus and the intensity of the positive feeling experience, in order to fit in with the group.

"Before entering this acceleration program, we were used to work remotely. I am passionate about data analysis, and I spent most of the time scanning our specific industry to search for emerging opportunities, to clarify our product offering. Attending business-related workshops, we realized how important was to our team not only developing an innovative product but also grow the business. I started to help my team mate when dealing with strategy decisions, the choice of a new designer, with developing the marketing strategy to reach our customer, and I realized to enjoy it!"

(Team 4, member 2, week 7 in-depth interview).

Social demand on individuals in order to feel appropriate may lead team members to exit their "comfort zone" and adapt their individual entrepreneurial passion focus to those closer to TEP.

External events impact

Team entrepreneurial passion was observed to affect the individual-level one also through external events. A startup co-founder stated that

"I attended an enlightening workshop on foundation of a startup, which seriously challenged by preconceptions and inspired me to aim higher. Before that I was more interested in developing an innovative technology, not really aiming at being considered the founder of a business. Conversely, my team presented itself as an experienced entrepreneurial team who founded different business ventures. After that workshop, I realized that in depth I was proud of being known as the founder and I found a new motivation when facing startup-related challenges".

(Team 8, member 1, week 2 in-depth interview).

Affective processes: Team culture emergence

Affective processes evolve over time, following the group development path. Routines, synchronized behaviours among members, alignment in goals and values tend to form when teams have been *interacting over a period of time*, reaching the "norming" or "performing" stage (Tuckman, 1965, 1977). This is confirmed by a mentor's feedback on a team, whose members have been working together over a long period of time on many different projects:

"It is an excellent team, with a good balance of skills, aligned vision and values. Experienced and complementing each other both during presentations and whilst working. Team co-founders (member 1 and 2) have worked together for a long time; this adds value to the team as well."

(Mentor 3, internal feedback document, week 4).

Collective team culture develops over time, after strong group interactions:

"Everyone's behaviour shapes the culture of the company. Some people may not agree to it, but they influence. If they don't agree, they leave." (Team 6, member 1, week 8 focused interview).

For example, the marketing trainee (team 2, member 4) was not involved in the pitch presentations nor in attending one-to-one meetings; she was only present in workshops. The team leader reasoned such informal norm with the importance of the pitch moment or of a one-to-one meeting. In his opinion, the business should be presented only by members who are aligned in goals and who are passionate about and committed to the business. The involvement of another trainee, a developer (member 5), during pitches is due to his strong identification in the startup and his technical know-how of the product, which other member would not be able to explain well (team 2, member 1, week 7 in-depth interview). According to the accelerator team member 1, member 3 involvement to present the startup's pitch has resulted in an increase in the level of team cohesion.

From week 3, perceptions of organizational and emotional norms were developed in some teams. They were having breakfast, lunch and dinner together, spending evenings having fun as a family of friends, going to the gym or cooking together. Some teams organized daily informal in-group meetings, during which the tasks of the day were defined, based on the leader's guidelines. Other startups spent time on checking the progress status of the startup deliverable.

Over time, members of the same team started getting closer among them, cohesion became stronger, implicit norms developed, members became independent, clearly knowing what their role in the team was. Often, implicit norms regulated their participation to the acceleration activities. However, these norms were mainly linked to each member's role in the startup. For example, when time was scarce, the team member who participated to a specific workshop was the one in charge of a certain role. Group norms develop both implicitly and deliberately:

"we have known each other for a long time. We have developed both intentional and non-intentional group norms and practices, which guide most of our behaviours. Our team is also thinking about developing a clear culture, to share with externals and with new members. We consider important happiness feelings, listening to others and feeling appreciated"

(Team 3, member 1, week 6 in-depth interview).

To develop a clear group culture, visionary entrepreneurs and co-founders are essential:

"having all co-founders together makes things much more powerful. Each of us has a role, and the first visionary founders of the startup are those who can really define the culture to be transferred to others, which must drive behaviours and decisions." (Team 3, member 2, week 6 focused interview).

A team founder makes some observations on the positive and negative influence of *informal environment* on the development of a collective culture and TEP:

"less formal environment and friendship among team members are two elements which help to develop a team culture and informal norms and procedures are formed. This represents an advantage for the team, as each member is flexible and knows how to take the best business decisions. Conversely, a too informal and friendly environment may lead people to relax and be less efficient and effective in their work, if they do not feel passionate at your same extent about the entrepreneurial venture"

(Team 6, member 1, week 7 focused interview)

Team-building activities help members to share experiences and emotions not related to the business, resulting in an enhanced group quality and performance. Team 2 spent a day hiking in the mountains. The experience has been extremely enriching for individuals, both as startup members and as person. The extremely positive experience of a team building activity in the mountains is summarized by a team member affirming that:

"I hiked up the Dolomites with my new team and couldn't help but see the 6 hour hike very similar to the journey of business and career. When things are tough, you need to keep your head down and focus on putting one foot in front of the other. Your team is walking on your side, and you will help each other, but must not forget that every now and again you need to look up & back at how far you've come from." (Team 2, member 6, week 8 diary).

This has further developed in-group cohesion, solidarity, synchrony and harmony. *Member 2* perceived team members being "open to each other, confident and proud, extremely energetic, flexible and creative after the hiking weekend" (Team 2, member 2, week 8 diary). According to Tuckman's model (1965; 1977), the team has reached the performing stage.

The result of team building weekends and meetings and of a long period working together full-time is the perception of team 3 as "a great, complete team" (Mentor 7, week 11 in-depth interview).

Feedback-seeking behaviours refer to the proactive search for information providing an evaluation of the job performed, especially focusing on the correctness and the appropriateness of activities and behaviours towards both personal and business goals achievement. Entrepreneurs who continuously search for feedbacks tend to experience a lower reduction in positive feelings over time because of role ambiguity and uncertainty (Collewaert, et al., 2016).

Observations of startups have shown that teams have different approaches to feedbacks on their business. Most of the teams are seeking for continuous advices, opinions and reviews from external experts. Team 3 co-founders (member 1 and 2) frequently asked for feedbacks from the accelerator team after each pitch presentation and each update one-to-one meeting with the accelerator team. The team focused on details; each business progress was submitted for feedbacks in order to improve it.

Feedbacks from mentors or expert may lead entrepreneurs to radically change their business idea:

"we felt that something was wrong with our business idea, but we were not able to understand what. As a team, our desire is to grow a company, making this match together. And we realized what did not match with our deep values thanks to a mentorship with Mentor 2. We revolutionized our business model, but now we are proud of how our business will be developed and our customer target reached." (Team 1, member 1, week 2 in-depth interview).

Conversely, other NVTs are reluctant to receive feedbacks and perceive external *observations as personal critics*, especially if provided by people considered non competent by the team:

"Negative unconstructive feedback have made my week really negative"

(Team 1, member 1, week 5 diary).

The accelerator program manager suggested all startups to *be open to feedbacks*, as they help to get new insights and develop a constructive relationship with external stakeholders.

The continuous search for feedbacks from critical stakeholders is expressed also by the negative feelings experienced when *one-to-one meetings with partner company managers were postponed*, deferring a possibility to obtain advices and evaluations from extremely influential individuals, which would have provided the startup with motivation and confidence:

"we were supposed to meet partner company manager 1 and our mentor partner company manager 3, but our meetings were cancelled. This considerably delayed our plans to gather evidence and feedbacks from both our main technical advisor and from a major representative of the target sector for our project, negatively impacting on our week mood." (Team 8, member 1, week 5 diary).

4.4.3. Time dynamics and time pressure in Team Entrepreneurial Passion

During an acceleration program, startups are subjected to *deadlines*, in order to achieve *temporary milestones*, thus successfully complete each phase (strategy, product, marketing&sales, funding), as shown in Figure 4.6. Time deadlines can be associated to midpoints, linked to a transition phase.

BUSINESS MODEL & PRODUCT & DESIGN FUNDRAISING MARKETING & SALES STRATEGY - Marketing Plan Communication Kit - Presentation Deck - Final business and - Business Model Canvas - Customer Journey - Alpha/Beta product financial plan - Demo Day/Night Pitch - Business Plan draft - Product features release - Presentation Deck draft and roadmap - Final Business Plan Deck - P&L forecasts Investors search and Landing page - Materials update follow-up Next steps roadmap

Figure 4.6: Typical time deadlines for each phase of an acceleration program.

Source: own elaboration from internal archival documents and public information on H-FARM website

Team entrepreneurial passion emergence and development is strongly influenced by time dynamics and their impact on team processes. *Time* has a *positive effect* on team dynamics, group emotion development and team performance.

By working and living together, close to each other, the team is getting much closer over time:

"When we worked remotely, we only had a professional relationship. Now we are friends. We know how to interact among each other. Conflicts arise, however they must be solved, if not they destroy the company. A startup is about people, and people must get along together."

(Team 6, member 1, week 7 focused interview)

To understand the flow of Team Entrepreneurial Passion evolution, it is important to consider the *time* pressure effects on team dynamics, especially on affective and identity processes. Empirical observations from the acceleration program show the impact of time pressure, mainly resulting from deadlines getting closer and time passing.

The analysis of team reactions is performed following the identification of transition and action phases towards goal attainment (Gersick, 1988) in each startup. However, team functioning should be observed from a dynamic perspective, considering that NVTs tend to manage multiple sets of activities simultaneously overtime, which require managerial effort (McGrath, 1991). To identify transition and action phases, the *manifestation of transition, action and interpersonal processes* and the *related activities* is observed (Marks, Mathieu, & Zaccaro, 2001).

During the entire observation period, every startup was observed to go through multiple action and transition phases simultaneously.

Team 7 reached the transition phase at startup level in week 8, after the branding expert (member 3) left, as both the co-founders were nervous because they felt to "lag behind with the execution of their startup, as they were not able to find the right path to pass from strategy to product development, even if enough work on business modeling and user interview has been done" (Team 7, member 1, update week 8 meeting with Accelerator team). In the previous week the team had looked for a human resource to help them go through a brand/identity transition and to improve the status of their brand, which is determinant for their value proposition. The hired branding expert made the team focus on a clear statement of the startup's mission and driving values, without operationally setting the main tasks, environmental conditions and team resource need to execute it. Thus, the transition phase was incomplete and the team was not able to perform improvements. Time pressure was perceived by the co-founders, as the accelerator program reached the final part of the product development phase and their offer was not progressing, because of them working on strategic goals rather than focusing on developing the platform at the basis of their service.

"A basic level of friction among them can be perceived, as they are trying to progress, but not able to" (Team 7, member 4, week 9 in-depth interview).

Initially, the perception of too short time to complete all tasks had a *negative impact* on team atmosphere and performance. However, the *arrival* for one week of the business model and business plan expert (team 7, member 4, week 9) provided the team the necessary feedbacks and insights to clearly specify sub-goals and to implement the execution plan of their strategy, positively affecting co-founders motivation and increasing their level of commitment towards task achievement. In fact, during week 9 the team developer (member 2) started coding and designing the user interface, working at night too" (team 7, member 2, update week 9 meeting with accelerator team).

After setting a clear execution plan, co-founders "decided to separate tasks, in order to simultaneously perform activities related to more than one goal, while coordinating and updating themselves" (team 7, member 4, week 9 in-depth interview). During the action phase a critical role was performed by feedbacks from mentors, partner company's manager and accelerator team.

As the acceleration program went into its more active stages, pressure on teams was increasing, as their workload was increasing, while time availability was reduced. Reaching *the midpoint of the acceleration program* represented for all startups the moment during which they considered to make some changes to their process and to their business.

Time pressure increased the level of perceived tension within teams and towards the acceleration team. The co-founder of *team 1*, influenced by his cultural rigid approach to schedules, experienced a fit of anger when the rough timetable of a one-to-one meeting with a mentor was not respected, because of unexpected events to be managed. He described this negative event as:

"learning how to work with the Italian calendar is a must-do. Time is extremely limited and schedule misunderstandings make the team lose more time. I plan a tight schedule and I have to learn that there is a difference between what is mentioned on the calendar and what actually occurs."

(team 1, member 1, week 2 diary).

In that specific event, the researcher, as participant-observer, had to personally deal with the situation and has observed the impulsive reaction of both team members (member 1 and 2). Member 1 became extremely *unpleasant and impatient*, he rose his voice volume and his face became extremely serious and frowning. Member 2 was firstly surprised of the other co-founder's reaction, but then she *automatically and spontaneously mimicked the same facial expression*. In her diary, she referred to this event as "Some miscommunication with the schedule" (Team 1, member 2, week 2 diary).

Italian teams adopted a more flexible approach towards changes in deadlines, being less stressed by getting closer to the time limit. However, these teams tend to increase the pace of group dynamics and team work with a lower intensity.

Teams were observed to *increase work rhythm as deadlines approached*, by working extra hours early in the morning and late at night. The acceleration program alternated weeks with high work load with periods of lower intensity in activities and meetings, leaving each startup the time needed to progress on their work. Intense weeks were particularly appreciated because of the high-value content and new insights provided by mentorships and workshops:

"The quality of some of the workshops and one two ones was excellent and the one to ones where very useful and practical. Connecting with such mentors is extremely valuable."

(Team 8, member 1, week 11 diary).

Many organized activities as part of the acceleration program were perceived to increase the stress level of startup members:

"a lot of workshops remove time that the team normally would have spent on core business tasks, making the total workload bigger and reducing available time." (Team 2, member 1, week 3 diary). While during the initial part of the program, startups were experiencing less time pressure because of the longer time horizon of the program duration, as weeks followed, "attendance to workshops must be carefully selected as the team must not waste time. There is too much to be done." (Team 2, member 1, week 9 in-depth interview).

The *most relevant deadlines*, setting the pace of team activities, were represented by weekly update meetings with the accelerator program manager on specific milestones and by meetings with potential investors or with partner company's managers.

Most of startup members perceived *time shortage* both when approaching towards a feedback meeting on a milestone and when the program was drawing near to the end. *Different team reactions* were observed.

Startups with a *clear strategy and activity roadmap* were likely to consider as a *challenge stressor*, as deadlines were likely to be positively perceived:

"Deadlines and time pressure is an additional motivation to work harder and accomplish our tasks, putting extra effort and coordinating with other team members. (Team 2, member 3, week 10 in-depth interview).

These teams tend to experience no in-group conflicts and positive, stronger interactions among them, reducing those with the external context and to . In order to release the Beta version of their software according to the internal roadmap, *team* 2 worked together in the evenings, reduced the time spent with others during meals and periodically met with other team members for brief updates on progress. After meeting the milestone in advance with respect to the planned release, the team leader organized a team celebration meeting, in order to congratulate with developers for their extra effort and with the other team members for support and to define each member's tasks to be accomplished in the following weeks (week 9).

Timely meeting deadlines has a positive impact on the feelings experienced by the team:

"Good progress on defined weekly goals positively impacted on the mood of the team and on the level of confidence we experience in reaching high-level goals" (Team 2, member 1, week 11 diary).

Another example of extra effort and motivation arising from the close deadline derives from *team* 2 preparation for the visit to a partner company's headquarter. Each meeting with all managers were carefully prepared, by understanding his role in the company, by defining objectives of the meeting and points to be discussed. Moreover, a complete user interface (UI) was created prior the visit, to be presented. To reach this level of performance, all the team worked until late at night:

"we arrived at the meetings exhausted, but strongly motivated and prepared. We are proud of our team work and our ability to put extra effort and support each other when needed.."

(Team 2, member 6, week 10 in-depth interview).

As deadlines get closer and time passes, teams were likely to experience a *higher level of familiarity* among members. Moreover, stronger relationships were build with external individuals, such as other startups' members, who "share our same experience, and understand what we are going through" (Team 8, member 1, week 8 in-depth interview).

This led different startups helping each other, in order to accomplish tasks on time. For example, member 1 from team 7 worked until late at night to help team 1 prepare its landing page for a meeting with a potential investor the following day. All teams were observed to help member 1, team 8, who was the only team member present in H-FARM when working on the Business Model Canvas:

"Teammates from other startups helped me brainstorming and developing my Business Model Canvas, as being a developer I did not know how to approach it" (Team 8, member 1, week 2 diary).

To meet deadlines on time, startups have been observed to *clearly define each member's role*, coordinating activities among business functions, with the team leader monitoring execution and overseeing the progresses:

"We have a meeting with a potential client in three days, so we have separated our tasks. I am working on the presentation deck and on defining our service proposition, while my other team member (member 2) is focusing on the improvement of the business plan, financial plan and metrics.

Our developer is working remotely on the landing page (member 3) Our continous interaction helps us in coordinating and be sure to get all the work done on time."

(Team 5, member 1, week 9 in-depth interview).

Thus, when time pressure was perceived as a *challenge stressor*, team members were likely to increase the level of effort in activity perforance, to enhance team coordination and interactions and tended to give or receive help from the inter-group context (other startups, in this specific case).

Other startups had a more vague timeline of the next steps, on temporary milestones, on each member's role and related activities. As time went by, the team members were observed to alternate moments of low and high motivation, task conflict episodes and no synchronyzation on activities' performance. Time pressure as an *hindrance stressor* was observed to negatively impact on the weekly team affective feeling and performance as "people not keeping up with their tasks blocked all the team's work" (Team 6, member 1, week 5 diary).

Affective feelings, individual and team behaviours in relation to time pressure and to the approaching of deadlines are likely to change over time, as team cohesion and familiarity evolves. Team members' close face-to-face interactions over time were observed to lead to the *creation or the increasing intensity of friendship*. Some startups are formed by teams of both coworkers and friends. Team 3 co-founders were friends before founding a new venture.

"Friendship helps to solve many problems, because we know each other so well that when something goes wrong or we have different opinions, we implicitly know how to deal with it: take some time alone and then speak to each other very calmly. It makes things go faster. However, it may be difficult for new members to understand our implicit balance" (Team 3, member 1, week 7 focused interview). Other startups were founded by a group of people inspired by business reasons. Friendship was observed to arise as a consequence of close interactions, especially sharing daily routines, as it occurs in H-FARM environment:

"As a team leader I felt important for our company come to H-FARM as it is making us grow as a team. We are learning how to engage among each other, how to motivate the team. The team dynamics and its performance depend on how the team is involved by the leader, on how members feel part of a family. And here we have become as a friend-family. And our startup's performance has been positively affected by this new balance." (Team 6, member 1, week 6 focused interview).

4.4.4 Group development over time

Over the three months observations, new venture teams have grown and developed. All startups were observed to have reached a *Performing group development stage*, as individuals have learnt to manage social interactions with others members. Moreover, each individual had a clear role in the team, as time is scarce, the environmental pace is extremely high and each individual has an essential role in achieving the overall business mission. Tensions and both cognitive and task conflicts among members were

observed to reduce over time. In week 8 an harmonious atmosphere was surrounding in-group and intergroup relations of all nine startups. *Mentor* 7 noticed that:

"An ispiring, positive and friendly atmosphere is surrounding H-CAMP and I feel harmony among team members, even though they are living an extremely intense period."

(week 11, in-depth interview).

4.6 Conclusions

The present chapter focuses on presenting team dynamics occurring within startup, while attending an acceleration program. Data collection was performed over nine startups, thus the unit of analysis of our qualitative research has various embedded units. For the case study analysis we relied upon qualitative research methodologies. The data collected through questionnaires resulted useful to understand the evolution of passion at individual and team level over time in each startup member. Information from informal in-depth interviews were collected from both startup members and external participants to the acceleration program. The former were asked about internal group processes, while the latter provided objective and external feedbacks and information on each startup dynamics and performance. Focused interviews were carried out with startup co-founders and permanent member, focusing on entrepreneurial passion topics. Participant-observations enabled us to collect information on internal team dynamics and individual members' spontaneous reactions towards team and external events, observing every startup and each member both in the business environment and in personal life, such as leisure moments. The evolution of team processes over time easily emerges from the description of the case study and the observed dynamics.

Our basis for the description of the collected information is the conceptual model of emergence and influence of Team Entrepreneurial Passion (Cardon, Post, & Forster, 2016). However, we highlighted also processes or elements not included on the referred model, that however emerged while performing our literature review on entrepreneurial passion, teams and group emotional dynamics (Chapter 2 and 3). In the following chapter, the results of the case study will be presented.

CHAPTER 5

DISCUSSIONS AND CONCLUSIONS

5.1 Introduction

Until this point, with our analysis we have explored the elements included in the Conceptual Model of Team Entrepreneurial Passion Emergence and Influence Cycle (Cardon, Post, & Forster, 2016). The literature proposed by the model's authors has been integrated, to eventually explain other dynamics, which have not been previously anticipated.

We have then analysed time-related literature, focusing on the impact of time on group processes and on development stages. The theoretical background enabled us to analyse data that emerged from multiple sources (questionnaires, diaries, observations, interviews) during an acceleration program. These data provided us with clear insights about how proposed literature is supported by empirical evidence. In this chapter we propose a discussion of the themes that emerged from the case study research, suggesting how our dissertation results aim to contribute to the current literature on entrepreneurial passion and offer suggestions for further research (paragraph 5.2). Then we yield findings that represents managerial insights for both business accelerators and startup founders or small business entrepreneurs (paragraph 5.3). Finally, the main limitations encountered in our case study and the boundary conditions of our dissertation's findings are explained (paragraph 5.4).

5.2 Discussion

The objective of our case study is to enter an *exploratory case study research* to understand how team entrepreneurial passion emerges and evolves over time, how time dynamics impact on it outcomes and rhythm. Our case study is carried out by analyzing and observing for a *three-months* period *nine startups* while participating to an acceleration program. The choice of this specific research context and unit of analysis is related to the increasing importance of startups for the economic and social environment and to the intense velocity of group and business processes during and acceleration program. A variety of data collection methods have been implemented, in order to gather information from different sources and perspectives: weekly questionnaire and diary submission, daily observations, interviews of startup members and of external experts. From a theoretical point of view, the main results deduced from the data analysis are presented in this paragraph.

5.2.1 The team leader role

The analysis of collected data in a broad perspective evidences the *critical role of the team leader* in both the emergence and the influence processes of Team Entrepreneurial Passion.

The proposed model on TEP (Cardon, Post & Forster, 2016) highlights the team leader role uniquely in the process of emotional contagion on teams, who may initiate the contagion process or may mimic itself other members' behaviours. However, the authors consider that emotional contagion may occur even when the leader is absent.

Our observations of teams over a three-month period has shown critical relevance of the leader in driving the group *towards the development of a group culture and the identification in it.*

During bottom-up emergence processes, the team leader assumes the important role *to guide and structure the team*. The leader should drive members through processes of bonding among individuals, of cohesion development and of team goal's alignment. Thus, the leader assumes the *role of mentor*, setting the example for other members, developing the "acceptable" social structure, to enhance team orientation and to motivate individuals to identify with the group (Kozlowski, Gully, Salas, & Janis A., 1996). Literature suggests that the mentor role is usually assumed during the early stages of group development (Forming and Storming). When the team reaches a certain level of cohesion and a group culture is developed (Norming and Performing), the team is observed to become more autonomous; individual focus shifts on task achievements and the leader is likely to assume the *role of coach*, as it has been observed in T*eam 2*.Over time the leader's role is less evident; however he tends to provide continuous guidelines or learning episodes to enhance team coherence in behaviours (Kozlowski, Gully, Salas, & Janis A., 1996).

Moreover, the leader has been observed to characterize the elements of the collective culture. In fact, the leader's entrepreneurial passion foci tend to be those emerging in team entrepreneurial passion, at least in the initial stages of development, as it has been observed in Team 2, 3, 6, and 7. As the team increases in cohesion level and group norms become routine, the impact of the leader's foci seems less intense, as individual members impact on the group construct. Moreover, the leader is observed to critically influence and guide the development and the content of the organizational and team identity. The leader is likely to impact on both affective and identity processes leading to the development of TEP. However, its role is found to affect on top-down influence processes, leading individuals towards alignment to the group culture and to re-evaluate their individual passion focus and intensities. Moreover, the leader is often likely to explicitly influence affective and identity processes through intentional affective induction, influence and impression management (Kelly & Barsade, 2001). Our observations show that the team leader has an important role in driving the team through change processes, during which core values and the basis of the team's identity are modified. This phase may profoundly impact on the team performance, as conflicts, anxiety and tensions are likely to arise. However, the leader may enhance positive feelings arousal and drive the team through the change in an harmonious atmosphere.

Focusing on TEP impact on individual outcomes, members' *entry and exit choices* are profoundly impacted by the leader. The personnel selection and management process is typically driven by the leader, who provides more or less relevance to TEP and group elements, who evaluates the individual's alignment with the team goals, objectives and behaviours. In small teams, it is usually the leader and

co-founder who conducts job interviews and who takes the decision on whether an individual should be part of the business team or not.

The *quality and the performance of team processes* are observed to be affected by the ability of the leader in driving members towards a greater integration and cohesion as a team and by its capacity to develop a positive atmosphere, fertile ground for the development of a shared mindset.

Our qualitative analysis research suggests to integrate the conceptual model by considering the team leader's role in both bottom-up and top-down processes and in the definition of team entrepreneurial passion, by using existing models related to leadership and team development (eg. Kozlowski, Gully, Salas, & Janis A., 1996).

5.2.2. The impact of the physical environment in TEP formation (bottom-up and rhythm)

Group behaviors are influenced by both affective and non-affective factors, especially in small groups (see Kelly & Barsade, 2001).

Our research has shown the *strong impact of the physical environment* on team member's moods, behaviours and affective processes. H-FARM is a relaxing and positive environment, where social interactions are empowered, harmony is enhanced and negative affective feelings and in-group conflicts are reduced. Moreover, the physical layout of The Serra, of the work stations and of the apartments encourages emotional expressions of each startup member, especially if positive. The feelings experienced in such environment are that "you must take your time, if it helps to be more productive" (Team 6, member 1, week 7 in-depth interview). Networking assumes a great importance, as many external companies and visitors walk by the campus, representing an opportunity for each startup to obtain feedbacks and business insights, other than to present the business idea to potential investors, driving the firm to success. The *isolated location of H-FARM* may be considered as both positive and negative. Even though logistic difficulties are evident, startup members have admitted that it typically has a positive impact on team and business development. In fact, team members share daily moments, getting to know each other and implicitly developing behavioral norms among each other.

Moreover, in this type of environment the team is focused on task achievement, as external "distractions" emerging when living in a city or close to the hometown are reduced. This is confirmed by a startup co-founder stating: "Without H-Farm environment it would be much harder, because you have other pairs to get opinions, suggestions, share insights. It is a stimulating environment (workshops, mentors, etc) and makes people focus on the business." (Team 8, member 2, week 3 diary). Thus, our observations show the strong impact of the physical environment in facilitating and increasing the rhythm of bottom-up emergence affective and identity processes.

Finally, a certain physical environment may foster the improvement of the group development stage and of the final outcome in terms of better team quality and performance.

Research has been increasing the attention towards *technological conditions*' impact on the group emotional experience and affective consequences (see Kelly & Barsade, 2001). Our case study research

has highlighted the strong impact of *remote working* in group development, in the foci of TEP, in the velocity and the type of affective and identity processes occurring in relation to the collective construct emergence and influence.

Face-to-face teams, physically present on site, were observed to more rapidly progress in terms of business goals and milestones accomplishments. Moreover, these groups were noticed to be at a further group development stage and to easily develop a group culture.

Conversely, computer-mediated groups, especially when one or more co-founders were working remotely, were observed to experience affective (such as emotional contagion and behavioral entrainment) and identity processes at a very low or null intensity. For example, new entrants did not match or mimic co-founders who were not present on-site, even though in real-time contact on a daily basis. Moreover, difficulties in computer-mediated interactions may negatively affect the feelings experienced by startup members, also the leader: "Not being able to interact with my team mates regularly in person had a negative impact on my week." (Team 8, member 1, week 1 diary). The arrival on-site of a member working remotely has been observed to drive the emergence of positive feelings, enthusiasm, motivation and stronger focus on business achievements, improving the quality of team outcomes: "The arrival of my team mate made the day much more productive." (Team 8, member 1, week 2 diary). Moreover, face-to-face interactions among all team members were observed to "make things much better and move on quicker" (Team 3, member 1, week 10 in-depth interview). Technological conditions tend to impact on the group development stage and on the pace of creation and adoption of a group culture and implicit norms within members.

Literature focusing on emotions and affective dynamics within small teams has been recently emphasizing the need for further research on the impact of non-affective elements, such as the physical environment or external events, on small groups internal processes, even though some academic research has already been developed (Kelly & Barsade, 2001). By consequence, we suggest scholars to focus their studies on the impact of non-affective factors on entrepreneurial passion at both individual and team level, as empirical observations show that these elements have a strong impact on startup teams' internal dynamics. We suggest to integrate the conceptual model of TEP with literature related to the impact of the physical environment and of technological conditions on the development of a shared collective emotion, mainly because of their impact on group dynamics.

5.2.3. The role of external elements on TEP top-down influence processes

The foci of Team Entrepreneurial Passion is observed to be influenced by the entrepreneurial learning path followed by each startup member, by the milestones defined in the acceleration program and by interactions with relevant stakeholders. The dynamic model leading to the development and to the influence of TEP is observed to be affected by factors related to the external environment. In our specific case study, we refer to external factors such as: a) *feedbacks provided to a startup by external actors*

(i.e. by mentors and experts, partner companies' managers and accelerator team members); b) *one-to-one meetings, mentorships and business-related workshops*, focused on the acceleration program phase; c) *partner company pressure* on startup progress. Even though, these elements were observed to impact also on the processes leading to the formation of a team-level entrepreneurial passion, external factors especially affected *top-down processes* and the team's *quality and performance*.

Feedbacks have represented a source of information for startup members, as these opinions were considered as an external, rational and unbiased evaluations of the startup progress. As previously reported, startup members consider external feedbacks "extremely relevant to us, as they enable our team to correct mistakes, to improve on a daily basis and to achieve faster and stronger success" (Team 3, member 1, week 5 in-depth interview).

Additionally, feedbacks were observed to be extremely relevant for startup leaders and co-founders to capture their compliance with the external business environment, especially from an investor perspective, in order to understand "what should we include in our business to be more attractive to potential investors?".

Feedbacks related to the startup external legitimacy, which were respected the most by team members, were represented by those received from the general acceleration program manager (accelerator team member 1), from the managers of partner companies (manager 1-4) and from potential investors.

Feedbacks and opinions received from the *acceleration team (member 1-9)* and from mentors and experts (*mentor 1-11*) were particularly taken into consideration for business and product development matters.

In general terms, feedbacks were observed to enhance *team cohesion* as all teams seemed to have aligned reactions (positive or negative) to external judgements.

External opinions showed to increase the *strategy execution rhythm*, by providing motivation to put more effort in carrying out business activities. They often *reassured* team co-founders *on the business development stage*, leading to the development of an *harmonious atmosphere* when positive feedbacks were provided or to an *increase in effort and task commitment* when negative feedbacks were given.

In some situations feedbacks were perceived by the team as external attacks, especially if arising from people they did not consider very expert on the topic, thus shutting themselves away and increasing the effort in following their previous roadmap or idea. This was noticed by *acceleration program manager 1*, who suggested teams to be open to receive feedbacks and do have a defensive reaction.

Previous literature has highlighted the importance external feedbacks. In fact, external individuals such as consultants, mentors or specialists have a critical role in leading the team towards successful execution, which occurs after the transition phase, during which dynamics have been readapted. In fact, they lead to the development of new perspectives and new insights on task performance (Gersick, 1988). Thus, we can suggest that feedbacks are extremely critical for the development of the in-group atmosphere and of group dynamics, especially in the initial stages. External opinions have been observed to enhance team cohesion, as members tend to adopt similar reactions, in order to defend their business

idea from external judgements. Moreover, external constructive opinions often resulted in *higher motivation and enthusiasm* in carrying out business tasks, offsetting the negative effects of increasing job demands on the intense, vigorous and positive work-related feelings.

Feedback-seeking behaviors resulted to *reduce* the strong effect of role ambiguities on the overtime *decrease of intense positive feelings* related to entrepreneurial passion for founding (Collewaert, et al., 2016). This can be noticed by observing the results of the data collected through weekly questionnaires, as shown in Figure 4.4 (chapter 4.3.2). In fact, even though many fluctuations occurred over time, the experienced intense positive feelings at week 11 for each entrepreneurial domain have reached a higher level than the initial level (week 1). Previous research found that intense positive feeling for founding tends to decrease over time; however, feedback-seeking behaviours may lead to a lower decrease or an increase in intense positive feeling experienced in relation to entrepreneurial passion domains (Collewaert, et al., 2016). The unit of analysis' continuous search for external feedbacks may explain the observed increasing trend. Thus, further research on Team Entrepreneurial Passion should focus on the impact of these behaviours and on the influence of external feedbacks on both bottom-up and top-down processes, on TEP construct and on Entrepreneurial Passion Diversity, in order to integrate current literature on entrepreneurial passion.

Entrepreneurial learning, provided by mentorships and workshops, represent an opportunity for the team to grow in cohesion and to develop new skills and competences. Over the observation period, these activities, especially when related to strategy, marketing & sales and business performance metrics, were observed to provide special insights and new perspectives to team members. H-FARM mentorships represent "a stimulating environment (workshops, mentors, etc), which makes people focus on the business and on growing as a team." (Team 8, member 2, week 7 focused interview).

Individual entrepreneurial passion, thus NVT Passion Diversity, may be impacted by the attendance to a workshop by a team member, as it may provide him/her with a different perspective, which may develop positive feelings for a certain entrepreneurial domain:

"I attended an enlightening workshop on foundation of a startup, which seriously challenged by preconceptions and inspired me to aim higher. [...]. After that workshop, [...] I found a new motivation when facing startup-related challenges". (Team 8, member 1, week 2 in-depth interview).

Many individuals admitted to be challenged to *exit the comfort zone*. This led them to get interested in new topics and to gain *new perspectives* on specific domains. For example, an individual or the overall team who is passionate about developing may become passionate about founding or of developing the business, after attending seminars explaining business-related topics, as occurred to *Team 2*, *member 3*. Additionally, as temporary deadlines where getting closer, startup members considered workshops to remove time and attention from their core business tasks "making the total workload bigger and reducing available time." (*Team 2*, member 1, week 3 diary). However, from mid-program on, many teams organized so that each team member attended the workshop related to his/her role, thus providing a proof of responsibility and trust among team members..

Literature on entrepreneurial learning and mentoring has recognized the critical role of these on the development of individuals, teams and organizations. In particular, *mentoring* represents a type of support to early stage entrepreneurs, to achieve their business goals (Sullivan, 2000). However, current literature on these topics should extend the research focus from the learning development process and the impact of learning on business success to the impact of entrepreneurial education on emotional aspects of the entrepreneurial team, such as on intense positive feelings, entrepreneurial passion or team dynamics. Resulting from our case study, we can observe that workshops and mentorships *further develop the group*, leading it to reach the *performing group development stage in a faster way*, where *clear roles and responsibilities* are provided to each member and increase entrepreneurs and individuals' *level of competencies, skills and variety of fresh ideas*.

Especially for the Wellness acceleration program, startup team dynamics, quality and performance was observed to be influenced by *interactions with the partner company*, which represents the *final potential investor*. Team members' effort in finding the most innovative and suitable product or service and in developing the business at a faster pace was observed to increase when preparing for one-to-one meetings with the *partner company manager 1*; when a positive feedback together with an incitement to further progress was received; when negative feedbacks with a suggestion to adjust the execution plan; when a company visit was planned (week 10). In these moments, teams were noticed to increase their *cohesion and trust level*, to *divide tasks and responsibilities* in order to perform activities at a higher rhythm, and to *socially interact* among them rather than with other startups' members.

In addition, the feelings experienced by every team and each member was negatively affected by difficulties in interacting with the partner company. In fact, as previously shown, negative feelings were experienced when a meeting with the partner company *manager 1* was postponed. Thus, we suggest that both bottom-up and top-down affective and identity processes, and their rhythm, may be impacted by *interactions with influential external partners and stakeholders*. Future research should take into consideration the relevance and the impact of relationships with external stakeholders on group-level dynamics, thus affecting TEP.

5.2.4 The blurred boundaries between professional and personal spheres

Over three-months in the specific H-FARM context, the occurrence of group dynamics have been observed both in *business-related moments* and during *social, informal interactions*. One of the characterizing features of *H-FARM* is the creation of an environment where formalities are reduced, where business activities involve socialization moments, and the other way round. Every startup shared with its members and with other startups *informal, daily moments* such as meals, apartment sharing, fitness activities, nights out, parties and weekend trips. During these moments, *team cohesion* intensified, group *informal norms* emerged, *empathy* developed and in-group *positive feelings* enhanced. However, *business discussions* were present on a continuous basis during informal events.

Conversely, all moments spent by the team in the working office, while *performing business tasks*, were characterized also by *frequent relaxed*, *social moments*. Startup members' were often observed to take breaks during working hours, or to discuss about personal topics while working on their business activity.

Blurred boundaries among professional and personal life of both the startup team and each member as an individual may result in both positive and negative effects.

In fact, informal moments may *improve the quality* of team affective and identity processes; moreover, they may *increase the pace of team dynamics* related to business actions. Positive feelings related to business topics, for example team excitement and satisfaction for the release of the Beta version of their product, together with the close collaboration on business tasks and the sharing of business opinions may *improve personal relationship* among members. These may result in friendship, which replaces the professional relationship:

"Before it was only a professional relationship but now we are getting closer, and I consider the other team members as friends" (Team 6, member 1, week 6 in-depth interview).

Conversely, this virtuous cycle may have a *negative impact* on the team and on the startup. In fact, *disagreements* at business level were observed to *impact on personal relationships* among team members, as occurred among co-founders *Team 6*, *member 1 and 3*. *Personal conflicts* among team members may also negatively affect the team atmosphere and the team composition. In fact, serious personal disagreements may result in a member exiting the startup, as occurred to *Team 3*.

The *mixture between personal and business life* is a typical characteristic of startups, confirmed by the evidence of new venture teams often made by friends. Further research should focus on whether these blurred boundaries affect positively or negatively the team's quality and performance. Moreover, the impact of this on TEP emergence and influence represents an interesting element to be studied.

5.2.5 The path from generalized passion to managerial passion

The time impact is particularly evident in *the experience of entrepreneurial passion in individuals*. During the first weeks of the acceleration program, startup members were often driven by *enthusiasm* and positive feelings for the overall business venture. They were observed to show *involvement* for inventing a product that could satisfy the needs of a specific customer target and to look for *networking moments* with potential investors to "feel entrepreneur".

As the acceleration program *entered more technical stages*, focusing on the product development and on its path to the market, the experience of entrepreneurial passion was perceived to be *more focused*, *to be "work-oriented"*.

This evolution from "emotional passion" to "focused, rational passion" may reflect the difficulties in finding an unique definition of EP, thus of TEP. We suggest that, as the business venture grows overtime, entrepreneurial passion shifts from a positive feeling resulting from "engagement in

entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon, et al. 2009b, pg. 517) to a more focused "love for work" (Baum & Locke, 2004). The observation of entrepreneurial passion evolution over time, especially at individual level, evidences the transformation of passion, which becomes *less emotional*, enthusiastic and grows more work-oriented.

This shift is particularly emphasized by keywords (Table 4.2), used by team members in defining each week. The most used terms during the first weeks are such as "Inspiring", "Excitement", "Thought-provoking", "Motivation", "Enjoyment", "Interesting". From week 5, the most common words are "Achievements", "Routine", "Productive", "Hard work".

Further research may focus on the evolution of entrepreneurial passion over time, both at individual level and team level, as the business venture develops. Particularly interesting may be to integrate the effect of this observed evolution of EP in the conceptual model of the experience of entrepreneurial passion (Cardon, Wincent, Singh, & Drnovsek, 2009) and of emergence and influence of TEP (Cardon, Post, & Forster, 2016).

5.2.6 Time pressure effects on Team Entrepreneurial Passion

The acceleration program scheduled *weekly temporary milestones* to be achieved by each startup, as shown in Figure 4.6 and Table 4.5. Each startup dealt with these in different ways, adopting *varying approaches to deadlines and intermediate goals*.

These differences were often observed to be *large* when teams were at different stages of development. In fact, *group norms and routines* are likely to develop when the team reaches a norming or performing development stage. These affect the emergence of TEP, which is associated to the development of a shared team culture and identity. Thus, we can propose a *match* between the development stage of the group and the formation of a mono-focal or poly-focal team entrepreneurial passion.

The *stage of group development* is observed to impact on the *velocity* of the emergence of TEP, of its impact on team and individual outcomes and on the influence of TEP on individuals. In fact, the more the group is developed, the more the individual identifies with the team, thus the more the individual attempts to adjust his/her values and behaviours to the team culture, to be coherent and integrated with other members, to develop a common behavioral approach to and perception of deadlines.

Teams, which were observed to be *more organized and structured*, such as *Team 1, 2, 3, 5, 9*, were observed to *face time pressure more positively*. The team effort increase, the overall group's mood was positive, enthusiastic and committed, while being able to *timely reach the milestone*.

Conversely, *team 4*, *6*, *7*, *8* felt *time pressure as a hindrance stressor*. This resulted to *negatively impact* on team effectiveness and harmony. As described above, *Team 7* experienced conflicts among team members, low motivation, a light panic feeling because it was not able to present at the weekly meeting the product development roadmap, because the team previously focused on the brand identity definition. *Team 8* lagged behind in the development of the BMC, mainly because the co-founder who is expert on business topics, was working remotely. During week that week, *member 1* was observed to be confused,

to miss a clear roadmap of what to do, to "grope in the dark, without points of reference" (Team 8, member 1, in-depth interview).

By consequence, we noticed that *time pressure* had *both a positive and negative impact* on the experience of intense positive feelings related to specific entrepreneurial domains. It was observed to affect the group's internal dynamics and to influence the focus of the group for each role. In conclusion, time pressure and deadlines affects mainly bottom-up team processes, thus impacting on the final performance of the startup.

The pace of affective and identity processes is observed to be strongly influenced by the perceived time flow and by time pressure effects on teams. In fact, the closer to the deadlines, the higher the pressure on teams to achieve tasks, the more positive or negative emotions are experienced. Further research should be conducted to deeply understand the role of time as an externally imposed element, through deadlines and milestones, on the emergence and the influence process of Team Entrepreneurial Passion. Moreover, the model of Team Entrepreneurial Passion could be integrated with literature on group development stages and on the impact of time on teams, according to the literature review of Chapter 3.

5.3 Managerial implications

The major contributions of this thesis are directed to two main actors: business accelerators or similar entities and entrepreneurs.

Nowadays, business accelerators are attempting to find new, groundbreaking acceleration program solutions, as discussed at the European Acceleration Summit (EAS) 2016. Among the main results of the summit, it has emerged the important role of the location and of the layout where the program is conducted, considering H-FARM as a successful example. Our case study results enhance the role of the physical environment in the success of a startup. In fact, perceived entrepreneurial passion of the entrepreneur and the team robustness is one of the main drivers of investors and VCs' choice whether to invest or not in a startup (Cardon, Sudek, & Mitteness, 2009). The higher the number of successful follow-on of accelerated startups, the more a business acceleration program acquires value. The context in which the startup operates is critical to develop group norms, to positively enhance the level of cohesion, trust and effectiveness of the startup team, to form a Team Entrepreneurial Passion, to create a positive, friendly, creative and stimulating team climate.

Our suggestion is to invest in creating an environment where startups are encouraged to *interact* among each other and with other startups, to be positive towards *new perspectives and feedbacks*, to *focus* on team and business development.

Business accelerators or similar should also invest in creating the conditions to enable teams to have *face-to-face interactions*, rather than working remotely. The presence on site of all or most of team members is critical to the development of a TEP and for the influence of this on each team member. For example, business accelerators located in the city center, simply providing the necessary business-

related infrastructure (e.g. WiFi network, meeting rooms, working space) are not effective in enhancing the development of a cohesive new venture team and the emergence of a Team Entrepreneurial passion. These locations should be in areas where *external distractions* are reduced.

Moreover, the acceleration program should provide areas where all startup teams can *share leisure and routine daily moments* together.

Additionally, business incubators and accelerators should invest in providing *high-level mentorships* and workshops, in order to positively contribute to the startup team's entrepreneurial learning. It is should focus also on activities related to *team building* and to the development of a *shared collective* culture.

In relation to *activities and services provided* during the acceleration program, these should be *carefully planned and managed*, in order to reduce time pressure and to enable the startup team to fully focus on business development in an harmonious way. In turn, all these elements will potentially have a positive influence on the development of entrepreneurial passion, both at individual and team level and the related dynamics' outcomes.

Finally, business accelerators, especially those leading Corporate acceleration programs, should concentrate on the *management of interactions between startups and technical partners and with the accelerator team*. These stakeholders are considered as extremely influential by startup members, who often ground their decisions on their feedbacks or opinions. Thus, the *choice of the technical partner* should be carefully performed and managed over time, as it also represents an *element of attractiveness* for startups when selecting the acceleration program to participate to. The *accelerator team* should be *empathic towards startups*, coaching teams and managing daily activities, thus enabling the startup to focus all the energies on business development.

Our thesis provides relevant suggestions to *entrepreneurs and founders* of a new business venture, especially *those who lead* an entrepreneurial team.

Our empirical observations of various startup teams showed the *importance of cohesiveness* among team members, *of business goals and values alignment*, *of empathy and mutual understanding*, in order to become a high-performing team.

Team Entrepreneurial Passion is observed to be a glue that ties together individuals, that gives a direction to job-related effort, thus enabling the startup to overcome difficulties and uncertainties experienced especially during the early stages of the business venture.

We suggest founders and team leaders to concentrate on *team building activities*, on *sharing opinions* with every team member, on making clear and spreading the *team culture*, on reducing the possibility of *conflict* occurrence due to uncertainties.

Entrepreneurs should invest *time and effort in nurturing cohesion and trust* within the team. Entrepreneurs and team leaders should be aware that the other members' *perceptions*, especially those who are not co-founders, of the entrepreneurial passion of business founders *affect their commitment to the business venture*, as these have an impact on the positive feelings experienced at work and on the

clarity of goals and objectives. Enhanced commitment is likely to occur when passion for inventing and passion for developing is perceived by non-founders (Breugst, et al., 2012).

Team leaders should be aware of the relevant role they have in the *emergence of a collective affect*, such as TEP, and in the *transference of a collective identity and organizational culture* to individual team members.

Additionally, the leader was observed to have a critical role in driving the *startup's group motivation,* the effort and the commitment towards business goals achievement. By consequence, each charismatic and influential member should behave in order to involve all members and to drive members to perform in an effective way while developing positive in-group relationships. It would be important to transfer passion for the specific business role to every member, who is determinant for the overall team success. Team conflicts represent an hindrance factor for the development of an effective and cohesive group. In order to reduce the level of business-related conflicts, or better, of task and process conflicts, clear roles and responsibilities should be given to each member. Doing so, each individual has been observed to develop tailored skills and competencies, which enable the startup to increase technical know-how and become more effective and efficient in the achievement of the competitive advantage.

Moreover, *formal group norms* should be developed, in addition to those informally emerging from group interactions and to Team Entrepreneurial passion, as they improve the quality and the velocity of team processes. This enables the new venture teams to *contrast time pressure negative effects*, by approaching deadlines as challenge stressors rather than hindrance stressors.

Strong focus in the *maintenance of a relaxed, low-uncertainty and structured team environment* could also reduce the startup members' turnover, as team exits are less likely to occur, providing the startup with increased stability.

5.4 Limitations and boundary conditions

The case study presents a few *limitations*, which have been partially discussed during the presentation of results.

In relation to the qualitative analysis performed, the main limitation is related to *the unit of analysis*. Startup teams were already formed at the beginning of the research, thus being at different group development stages. By consequence, the emergence of Team Entrepreneurial Passion could not be observed since the first manifestation. Additionally, this could have led us to biased conclusions on the observance of the evolution and the velocity of team processes occurrence.

Moreover, observations related to *multicultural teams* (team 1, 2, 3, 6, 7, 8) may have been biased by not complete and thorough understanding of national culture-specific values and behaviours. Thus, further research could analyze the impact of multiculturalism on the development of team entrepreneurial passion, extending current literature on multicultural team dynamics.

Our case study is focused on nine startups participating to an acceleration program in a specific environment. Additionally, difficulties in collecting data involved in the measurement of Team Entrepreneurial Passion, by submitting weekly questionnaires and diaries, have been experienced. In fact, the response rate to these decreased over time and it was quite limited since the beginning. This may lead us to biased conclusions due to the *limited sample size selection* and the *reduced response rate*. It would be interesting to conduct the research by collecting data from a larger group size of units. Future qualitative research may extend the number of startups observed; additionally, it may collect data from different acceleration programs in various locations, or it could adopt as unit of analysis startups which are not participating to an acceleration program.

An additional limitation to our study results may be the *limited data collection period*. In fact, 11 weeks of daily observations enabled us to collect and analyze a great amount of data, covering three quarters of an entire acceleration program. However, further research may observe startups on an extended time frame.

Another limitation is referred to *participant-observations*. Even though various collection methods have been adopted to avoid biases, participant-observations may be partially affected by *the researcher's difficulties in maintaining an active but affectively not involved role in a dynamic environment*. This limitations has been offset by external observations and Professor Gianecchini's data analysis review.

In relation to *boundary conditions*, the generalization of our study could be prevented by the effect of the context-related variables. In fact, our data collection, especially the one related to observations, was carried out in an atypical environment. *Business accelerators* represent atypical environments in and of itself. Additionally, *H-FARM is an unique accelerator*, both at national and international level, as the majority of business accelerators have a less friendly environment. The campus-like structure, the presence of a common dining area, the informality of office spaces and the surrounding green area of H-FARM facilitate group dynamics. It could be interesting to analyze startups in different business accelerators with differing environmental features, in order to understand the real role of the physical environment on startup teams and on TEP.

Moreover, the extension of the research unit of analysis to *startups not participating to an acceleration program* may provide new and different results, compared to those of the current case study. A special focus of further research could be on contexts where startups tend to work remotely, in order to understand the *impact of computer-mediated interactions* the emergence and influence of TEP over time, compared to face-to-face ones.

An additional boundary condition is represented by the *startup team*, *compared to a small business team* as unit of analysis. Internal dynamics of a startup are much more uncertain and faster, if compared to those of a small size enterprise. Thus, we feel unconfident in extending our results and our managerial implications to new ventures operating in a more structure and stable environment, involving lower risk and experiencing a reduced relevance of the entrepreneurial team on the final business performance.

5.5 Conclusions

This chapter discusses the data analysis performed in Chapter 4. The aim of this dissertation is to understand how team entrepreneurial passion develops and evolve over time, focusing on the impact of time-related elements on the collective construct and on the rhythm of the emergence-influence TEP cycle.

Various contributions to the existing literature have emerged. These are explained in paragraph 5.2, in order to suggest integrations to the conceptual model of the Team Entrepreneurial Passion emergence and influence cycle.

The *team leader role* has emerged to be relevant in all bottom-up emergence processes and top-down influence processes related to TEP.

We also highlight the role of *non-affective elements* on the development of TEP over time, especially on the collective feelings experienced by the team, on top-down processes and on the team's quality and performance. The *physical environment* is extremely relevant in the determination of the pace and of the quality of team dynamics. *Technological conditions* have enabled teams members to work remotely; however negative consequences are experienced by teams, which are affected by reduced or absent face-to-face interactions. Moreover, a reduction of the pace of team processes may occur. External elements such as *external feedbacks*, *entrepreneurial learning activities and relationships with external stakeholders* are observed to influence the rhythm and the quality of team processes, the influence of TEP on individuals, individual exit and entry choices. The performance of a startup team is observed to be strongly affected by the described external elements.

An additional element that emerged to impact on the development of TEP and of the team itself is represented by the *blurred boundaries between the personal life* of the individual member *and the professional, startup-related sphere*. It is not possible to distinguish among business and personal life of *startuppers, as* these are an unique element. The impact on team development is extremely relevant. Considering the evolution of Team Entrepreneurial Passion and of the related dynamics over time, it can be observed a shift of the type of feelings experienced: from "general, emotional passion" to "managerial passion for work".

Time as an external element is observed to impact on team affective processes and on the final team performance. In fact, *time pressure and externally imposed deadlines* have different effects on members' behaviours, depending on whether these time-related elements are perceived as challenge or hindrance stressors.

To follow, we provide business accelerators and entrepreneurs or startup founders with managerial suggestions arising from our dissertation discussion, in order to enhance future business management and performance (paragraph 5.3). Team Entrepreneurial Passion is an extremely relevant element, as it is observed to have a critical role in the startup success and ability to collect external investments. Business accelerators should invest in creating an environment which fosters the development of TEP

and the emergence of a cohesive, high-performance teams. Entrepreneurs, startup co-founders and new venture team leaders are those who drive the emergence of TEP and is influence of individuals. Teams are a strategic resource, that must be nurtured, and whose members should be appreciated. Startup leaders must enhance the emergence of cohesion and trust among team members, thus enhancing team and startup's performance.

Paragraph 5.4 is dedicated to explain limitations and boundary conditions of our exploratory unitary case study research with embedded unit of analysis, carried out by observing nine startups participating in an acceleration program.

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Appendix A: The diary of a startupper

Nar	me and Surname
Star	rtup
We	ek
1.	Describe the main activities you have performed this week and events you consider worthy to be remembered.
2.	What has made this week a positive and colorful week? Explain the events/situations making this a colorful week, causes, consequences and your personal considerations.
3.	What has negatively affected you week? Provide a clear overview of the originating events, the causes and the effects, explaining why they impacted negatively on your week.
4.	Provide three keywords (adjectives) to describe this week, using a decreasing order of importance. 1. 2. 3.
5.	How many hours have you worked on your startup this week?
6.	Consider 100 as the time you have been working for your team, provide a number

representing the share of this time dedicated to the following activities:

				nt in performing the activity		
Activity	time (hrs)	Very Dissatisfied	Dissatisfied	Neutral	Satisfied ②	Very Satisfied
Searching for new ideas for products/services to offer or making existing products/services better (e.g. participation to conferences or workshops, reading specialist newspapers, scouting on similar startups,etc.)						
Developing new products or services, and working with new prototypes (e.g. working on Alpha or Beta version of your product, improving the website or the content of your offer, etc)						
Collecting and putting together the necessary financial, human, and social resources needed to create a new venture in the future. (e.g. participation to meetings with stakeholders, searching for possible partners, networking with possible investors)						
Bringing up the business to emerging success (e.g. attending interesting workshops, asking for feedbacks, looking for new ideas, etc.)						
Motivating your teammates and yourself to make the company better. (e.g. holding meetings for asking opinions and motivating, being positive and cheerful, etc)						
Assembling the right people to work for the business (eg.scouting activities for hiring new developers or design experts, specialists with competences the firm lacks, etc.)						

Using a range 1 – 5 [1='strongly disagree'; 2='disagree'; 3='neither agree nor disagree'; 4='agree'; 5='strongly agree'], rate the following affirmations:

7. My team considers important to be innovative and creating new solutions to problems.____

- 8. My team considers important being the ones who found the business.
 9. My team considers important developing and growing the company even after the foundation.
 10. Inventing new solutions to problems is an important part of who I am.
 11. Being the founder of a business is an important part of who I am.
- 12. Nurturing and growing businesses is an important part of who I am.

Appendix B: Acceleration Program events

Acceleration program events occurring during the Fashion & Retail accelerator and Wellness accelerator (Source: own elaboration)

Week	Acceleration program phase	TEP domain (inventing, founding, developing)	Event type (entrepreneurial learning&mentoring feedback; networking with external stakeholders; Social interactions)	Event description
Week 0 (15 th , 22 nd April)	Selection	Founding	Feedback; networking with external stakeholders	Open-day of Fashion&Retail Acceleration Program and Wellness Acceleration Program. Startups are invited to pitch in front of the accelerator team and of industry experts. Evaluations are on team, idea, market, product, execution and affinity with the program.
Week 1	Welcome	Founding	Entrepreneurial learning; social interactions	Kick-off meeting: presentation of the program, of the participating startups and of the accelerator team. Introduction on entrepreneurship.
Week 1	Welcome	Developing	Feedback	One-to-one meeting of each startup with the <i>accelerator team</i> on general overview, expectations and others.
Week 1	Welcome		Social interactions	Review of the Welcome Kit, providing useful information on board and lodging, facilities, surrounding areas, transportation, etc.
Week 1	Strategy	Inventing	Entrepreneurial learning	Workshop on Business Model Canvas held by accelerator team manager 1 (Accelerator Program Manager)
Week 1	Welcome	Developing	Social interactions	Daily team building activity, called "Whai Whai" in Venice
Week 1	Party		Social interactions	Informal BBQ and party on Friday evening organized by startups' members in the common areas of their accomodations.
Week 2	Strategy	Founding	Entrepreneurial learning and mentoring	Lecture by <i>Mentor 1</i> on entrepreneurship, innovation and self-discovery, enhancing the consciousness and the spiritual meaning of being an entrepreneur. Startup members and teams had the possibility to do personal conversations with the mentor.
Week 2	Strategy	Developing; founding	Entrepreneurial learning	Workshop of Presentation Design, providing clear guidelines on how

				to prepare an effective pitch
Week 2	Strategy	Inventing	Entrepreneurial learning and mentoring	presentations. Workshop on Lean Startup and Lean Canvas by Mentor 2, followed by two days of one-to-one meetings with startups.
Week 2	Strategy	Developing	Entrepreneurial learning	Legal assessment of each startup to provide tailored advices on legal issues.
Week 2	Strategy	Developing	Entrepreneurial learning	Technical partner Skype call to provide tailored technological support to startups on business metrics analysis (<i>Mentor 9</i>)
Week 2-3	Strategy	Inventing, Founding, Developing	Feedback	Daily reviews of progresses on Business Model Canvas development, to stress critical points and improve it.
Week 3	Strategy	Founding, developing	Entrepreneurial learning	Workshop held by an Alumni startup, WeFitter, on previous experience of the acceleration program, on difficulties faced and on advices for success.
Week 3	Strategy	Inventing, Founding, Developing	Feedback	One-to-one meetings for the Business Model Canvas review by the accelerator team, under the supervision of the Accelerator program manager
Week 3	(only for Wellness Accelerator)	Inventing, Developing	Networking with external stakeholders	Participation of startups' members to Rimini Wellness exhibition to update on latest products and innovations on wellness and fitness industry.
Week 4	Strategy	Founding	Social interactions	Informal and funny pitch session of all startups in the acceleration program in front of the H-FARM employees, in a relaxed environment. The pitch presentations ended with an happy hour, in order to enhance relationship building and community building.
Week 4	Strategy	Inventing, Developing	Entrepreneurial learning and mentoring	One-to-one meetings with <i>Mentor</i> 3, an experienced strategy consultant, who worked with each startup on specific assigned tasks. The visiting mentor worked with startups for four entire days, adopting a rigid and critical approach on work but building strong relationships with each team.
Week 4	Strategy	Inventing, Founding, Developing	Feedback	One-to-one meetings to review the Business Model Canvas and the Pitch Deck (included in the communication kit) by the accelerator team, under the

				supervision of the Accelerator
				program manager
Week 5	Strategy	Developing	Entrepreneurial learning	Workshop on useful legal contracts.
Week 5	H-FARM event	Founding	Networking with external stakeholders	European Accelerator Summit hosted in H-FARM. It is an international event, hosting more than 30 of the largest European accelerators and also other industrial and financial institutions to discuss on the future trends of accelerators.
Week 5	Strategy	Developing	Entrepreneurial learning	Practical workshop on Agile methodology applied to project and general startup activities management, followed by one-to-one meetings between the mentor and each startup.
Week 5	Strategy	Developing	Entrepreneurial learning and mentoring	Workshop and one-to-one meetings on operational strategy, negotiation techniques and crisis management.
Week 6	Strategy	Developing	Entrepreneurial learning	Legal workshop on Intellectual Property Rights and Trademarks
Week 6	Strategy	Developing	Entrepreneurial learning and mentoring	Workshop followed by one-to-one meetings held by <i>Mentor 4</i> on collaboration models between startups and the business environment, by developing creative innovation.
Week 6	Critical Event		Social interactions	One of the accelerator program managers left (accelerator team member 2). Sadness and disorientation feelings arised among all startup members, because of the particular relationship everyone built with him.
Week 6	Strategy	Entrepreneuri al learning	Entrepreneurial learning	Workshop held by an Alumni startup, Coachademy, on previous experience of the acceleration program, on difficulties faced and on advices for success
Week 6	Strategy/Prod uct Development	Developing	Entrepreneurial learning	Workshop on metrics and analytics to review overall and KPI performance.
Week 6	Critical Event	Founding, Developing	Feedbacks; Social interactions	Evening pitch session organized by startups themselves to practice pitch presentation, involving every member of the startup and requiring critical feedback.
Week 6	Strategy/Prod uct Development	Inventing, Developing	Feedback	One-to-one meeting with the accelerator team for a final revision of the Pitch Deck and to introduce the next milestone: Product Roadmap, which highlights where the startup is in

				the product development cycle and focus on priorities and
				eventual resource needs.
Week 6	Product Development	Developing	Entrepreneurial learning and mentoring	Workshop and short one-to-one meetings on online marketing and communication in the fashion&retail industry, providing examples from his professional experience in large multinational
Week 6	Only Wellness Accelerator	Developing	Feedback	companies. Periodic one-to-one meeting with the corporate partner of the accelerator (<i>Manager 1</i>), to analyse current status, progress and future steps of startups in the wellness and fitness industry.
Week 6/7	Product Development	Developing	Entrepreneurial learning and mentoring	Workshop and one-to-one meetings with an expert of Product Design, User Experience and User Interface (UX/UI), mentoring startups on the translation of strategic ideas in product development, adopting a customer-oriented approach
Week 7	Product Development	Inventing, Developing	Entrepreneurial learning	Workshop held by an Alumni startup, Competitoor, on previous experience of the acceleration program, on difficulties faced and on advices for success
Week 7	Only Fashion&Retai I accelerator startups	Founding, Developing	Networking with external stakeholders	Pitch presentations of startups participating to the Fashion&Retail accelerator to corporate partners, which are selected among the industry leaders.
Week 7	H-FARM event	Founding	Networking with external stakeholders	Networking aperitif and dinner of the nine startups in the acceleration program with corporate fashion&retail partners and and accelerator team.
Week 7	Only Wellness accelerator startups	Founding, Developing	Networking with external stakeholders	Pitch Presentation for manager of one of the major worldwide brands for sports equipments and apparel (Partner company manager 4). Postponed meeting with partner company manager 1
Week 7	Product Development	Developing	Feedback	One-to-one meeting with the accelerator team for a final revision of the Product Roadmap and introduction to the Customer Journey and Customer Experience
Week 8	Product Development	Developing	Entrepreneurial learning and mentoring	Workshop and one-to-one meetings with Israelian experts mentor 4 and 5 on Social Media, Content Marketing, Growth hacking and community building.
Week 8	Strategy	Founding	Mentoring	Fire-side chat in the evening on entrepreneurship, reasons for

				business development and entrepreneurial experience with mentor 4 and 5.
Week 8	Product Development	Developing	Feedback	Weekly one-to-one meeting with the accelerator team for a review of the Customer Journey and update on progresses.
Week 8	Only Wellness Accelerator	Developing	Feedback and mentoring	One-to-one meetings of startups with industry mentors assigned by the corporate partner of the accelerator to each startup, to provide advices and know-how to further improve the business (Partner company manager 2, 3).
Week 8	Product Development	Inventing, Developing	Entrepreneurial learning and mentoring	One-to-one meetings with <i>Mentor</i> 10 on business and product development specifically tailored for startups, providing experienced advices thanks to her entrepreneurial background.
Week 8	H-FARM event	Founding	Social interactions	BBQ evening for all startups sponsored by a technical partner (<i>Mentor 9</i>). Discussions were especially on entrepreneurial experiences.
Week 8	Product Development	Developing	Entrepreneurial learning	Workshop on functioning, procedures and requirements for Horizon 2020, the EU investment program.
Week 9	Product Development	Inventing	Entrepreneurial learning	One-to-one meetings with an expert of software architecture
Week 9	H-FARM event	Founding	Networking with external stakeholders	Pitch presentation of startups to sudents of Venture Capital class from Bocconi University
Week 9	Product Development	Inventing, Developing	Feedback	Weekly one-to-one meeting with the accelerator team for an update on progresses and discuss open points and doubts. This week concludes the Product Development period to enter the Marketing&Sales stage.
Week 9	Product Development	Developing	Entrepreneurial learning	Workshop on public funds available for Italian startups (POR/FESR)
Week 10	Marketing & Sales	Developing	Entrepreneurial learning and mentoring	Workshop on Customer Acquisition strategies, providing critical elements to plan it correctly followed by one-to-one meetings with <i>Mentor</i> 8
Week 10	Marketing & Sales	Developing	Entrepreneurial learning	Workshop on legal issues and practices related to Advertising and Social Networks
Week 10	Strategy/Mark eting & Sales	Inventing, Founding, Developing	Entrepreneurial learning and mentoring	One-to-one meetings with <i>Mentor</i> 11, on consulting large corporations and startups in business development,

				innovation, leadership, team development and entrepreneurship.
Week 10	Only Wellness Accelerator	Founding, Developing	Feedbacks; networking with external stakeholders	All 4 startups in the Wellness Accelerator visited the corporate partner facilities and met their mentors and other managers performing nfluential industry roles (<i>Partner Corporate manager 1, 2, 3</i>).
Week 10	H-FARM event		Social interactions	Annual theme summer party organized by H-FARM open to all employees, to Alumni and current startups, and to all corporate divisions (more than 500 people). This summer the theme was H-University.
Week 11	Marketing & Sales	Inventing	Entrepreneurial learning	Workshop on data mining
Week 11	Marketing & Sales	Developing	Entrepreneurial learning and mentoring	One-to-one meetings on Search Engines Optimisation (SEO), User Experience (UX), Conversion Rate Optimization and Digital Marketing.
Week 11	Marketing & Sales	Developing	Entrepreneurial learning	Workshop on marketing matrix and marketing plan, held by Timothy O'Connell.
Week 11	Marketing & Sales	Inventing, Founding, Developing	Entrepreneurial learning and mentoring	Workshop on marketing and communication strategy based on community building, followed by intense one-to-one meetings with <i>Mentor 7</i> , an Israelian consultant and expert on deep entrepreneurial reasons, business development and community building.
Week 11	Marketing & Sales	Developing	Entrepreneurial learning	Workshop on Corsporate Social Responsibility (CSR) at startup level, on wellness as a sustainable action for company welfare and on sustainable purchases from an aware and ethic customer.
Week 11	Marketing & Sales	Founding, Developing	Feedback	Weekly one-to-one meeting with the accelerator team to review the draft of marketing plan, to discuss the progress on the marketing matrix and to introduce the forthcoming fundraising period.
Week 11	External event		Social interactions	The termination of the working period of a member of the acceleration team.