



# *'Liquid city'*

The evolution of Porto's cultural and creative entrepreneurial ecosystem

**Miguel Jácome Neiva** | 479197

Master Thesis

June 2018

Supervisor: Dr. Mariangela Lavanga

Second Reader: Dr. Ellen Loots

**M.A. Culture Economics and Entrepreneurship**

Academic Year 2017-2018

Erasmus School of History, Culture and Communication

Erasmus University Rotterdam

Cover photo: © Maria Louceiro, August 2016.  
(Source: <https://www.marialouceiro.com/post/148878787226>)

## Abstract

Porto changed from a *hard* to a *liquid city*, where traditions, new fluxes of culture and people try to coexist. Entrepreneurship became a strategic priority of policymakers in the territories where Porto is embedded, arguably motivated by economic recession. In entrepreneurial ecosystems, entrepreneurship is seen as a result from the interaction between entrepreneurs and the surrounding environment. Despite much attention has been given to the study of cultural and creative industry clusters, literature applying the entrepreneurial ecosystem approach to these sectors within a region is scarce. Earlier studies have been criticized for taking a static approach to the study of entrepreneurial ecosystems. The region of Porto has a long reputation as a strong cultural and creative cluster in the national context, an idea which became concrete with a study from 2008 promoted by Serralves. How has Porto's cultural and creative entrepreneurial ecosystem evolved since 2008? This study analyzes the interactions between the main actors and factors of Porto's cultural and creative entrepreneurial ecosystem and explains its evolutionary dynamics. This is done by the means of an embedded case study, with qualitative semi-structured interviews to entrepreneurs and experts, supported by quantitative data from multiple sources.

**Keywords:** Porto, entrepreneurial ecosystem, cultural and creative entrepreneurship, liquid city, evolution

## Acknowledgements

*“Porto is the place where wonders and all anguishes begin for me”*

- Sophia de Mello Breyner

There could not have been a sentence that would better describe this journey, from the moment I was sure no other place deserved such devotion, until I sat down to write these final words in perplexity. This flight over the cuckoo’s nest would not have been possible without the advice and emotional support of some people.

I would like to thank my dear supervisor Dr. Mariangela Lavanga for always being so positive yet straightforward when I felt helpless. By treating me as an equal, she gave me confidence to follow my instinct and focus on the argumentation. Besides, she also cared about other aspects of my personal life beyond the thesis. Next, I would like to thank all the participants for their time and valuable contributions. Most of the data in the results would be impossible to have access to without them.

I owe a great deal to Konstantinos for bearing with me and my struggles on a daily basis in this never-ending-summer-city of Athens, which I kept seeing (or imagining) from my window. Joana and Lexa deserve my gratitude for helping me transcribing the interviews more effectively, while adding humor to the equation. Thanks also to Maria for the beautiful cover photo (I recommend checking her profile, as she is a great photographer). In general, I would like to thank everyone - my mother, classmates and friends - who was supportive, especially in the tough moments.

I dedicate this work to my mother, without whom I would not have been here in the first place.

## Table of Contents

<b>Abstract</b> .....	<b>3</b>
<b>Acknowledgements</b> .....	<b>4</b>
<b>Chapter 1: Introduction</b> .....	<b>9</b>
<b>Chapter 2: Entrepreneurial ecosystem</b> .....	<b>12</b>
2.1. Defining entrepreneurial ecosystem .....	12
2.2. From new business formation to entrepreneurial ecosystem .....	14
2.3. Related theories and concepts of regional development.....	17
2.4. Elements and interactions .....	19
2.5. Evolutionary dynamics, emergence, resilience, sustainability .....	22
2.6. Cultural and creative entrepreneurial ecosystem .....	26
2.6.1. Industry-specific and place-based conceptual framework.....	26
2.6.2. Cultural and creative entrepreneurs .....	30
2.6.3. Cultural and creative entrepreneurial environment .....	31
2.7. Concluding remarks .....	33
<b>Chapter 3: Porto, an emerging cultural and creative city</b> .....	<b>35</b>
3.1. Porto European Capital of Culture 2001 and UEFA Euro 2004.....	37
3.2. ADDICT and the Northern Portugal Cluster of Creative Industries.....	38
3.3. Portuguese economic recession .....	39
3.4. Municipal elections and change of local government .....	40
3.5. Research expectations .....	41
<b>Chapter 4: Methodology</b> .....	<b>42</b>
4.1. Research method and design.....	42
4.2. Units of analysis .....	44
4.3. Data collection .....	46
4.4. Data analysis .....	49
<b>Chapter 5: Results</b> .....	<b>51</b>
5.1. Profile of entrepreneurs and entrepreneurial activities.....	51
5.2. Interaction between entrepreneurs and the environment.....	53
5.2.1. A livable place seeking diversification .....	53
5.2.2. Education as source of talent and demand.....	55
5.2.3. Informal collaboration overrules institutional support.....	56
5.2.4. Public leaders are feeders .....	60
5.3. Evolutionary dynamics of Porto's ecosystem .....	63
5.3.1. Emergence: aftermath of mega-events.....	63
5.3.2. Resilience: economic recession .....	65
5.3.3. Resilience: change of city council .....	67
5.3.4. Sustainability: opportunities and threats .....	68
<b>Chapter 6: Conclusion</b> .....	<b>70</b>
<b>References</b> .....	<b>74</b>
<b>Appendix</b> .....	<b>80</b>
A. Mapping Porto's entrepreneurial ecosystem.....	80
B. Overview of interview subjects .....	82
C. Interview guides.....	84
D. Coding List .....	88
E. Porto City Council conference on national art subsidy cuts .....	89

## List of Figures

Figure 1: New Business Formation, An Ecosystem Model (Valdez, 1988) .....	15
Figure 2: Key elements, outputs and outcomes of the entrepreneurial ecosystem (Stam, 2015). .....	20
Figure 3: Entrepreneurial ecosystem interactions (own elaboration, adapted from Bathelt et al., 2004).....	21
Figure 4: Evolution of entrepreneurial ecosystems (excerpt, Mack & Mayer, 2016).....	23
Figure 5: Transformation of entrepreneurial ecosystem (Spigel & Harrison, 2018).....	25
Figure 6: Creative-based strategies in small and medium-sized cities – a conceptual model (left) and Obidos’ territorial embeddedness (right) (Selada et al., 2012) .....	28
Figure 7: Conceptual framework of an industry-specific and place-based entrepreneurial ecosystem (own elaboration, adapted from Stam (2015).....	29
Figure 8: Entrepreneurial activities location in Porto (own elaboration using Google Maps)....	48
Figure 9: Timeline of interviewee’s entrepreneurial activities and analyzed events in Porto (own elaboration) .....	49
Figure 10: Entrepreneurial activities’ performance: average growth (size) and survival (own elaboration) .....	53
Figure 11: Geographic distribution of Portuguese registered festivals with a music focus in 2016 (Bramão, 2016) .....	55
Figure 12: Distance between identified nodes of the Northern Cluster (own elaboration using Google Maps).....	61
Figure 13: Cultural and creative activities in Porto's city center by year of opening (Serralves, 2008) .....	65

## List of Tables

Table 1: Differences and similarities between entrepreneurial ecosystems and related concepts (Stam, Spigel, 2018) .....	19
Table 2: Elements and key actors and factors of the cultural and creative entrepreneurial environment (own elaboration, adapted from Stam, 2015) .....	30
Table 3: Business model and financial sustainability of entrepreneurial activities .....	62

## List of Abbreviations

<b>ADDICT</b>	Creative Industries Agency Portugal
<b>DGARTES</b>	Portuguese Arts Council
<b>ECoC</b>	European Capital of Culture
<b>ICTs</b>	Information and Communication Technologies
<b>KEA</b>	KEA European Affairs
<b>Northern Cluster</b>	Northern Portugal Cluster of Creative Industries
<b>UEFA Euro</b>	UEFA European Championship
<b>UPTEC PINC</b>	Creative Industries Incubator of University of Porto



*“Contemporary cities are the battlegrounds on which global powers and stubbornly local meanings and identities meet, clash, struggle and seek a satisfactory, or just bearable, settlement – a mode of cohabitation that is hoped to be a lasting peace but as a rule proves to be but an armistice, an interval to repair the broken defenses and re-deploy the fighting units. It is that confrontation, and not any single factor, that sets in motion and guides the dynamics of the **‘liquid modern’ city**”*

– **Zygmunt Bauman** (1925 – 2017), sociologist and philosopher  
from *Liquid Love: On the Frailty of Human Bonds* (2013)

*“The city moved like a boat. (...) The city looked like lead crystal. It moved with the tides. It was a mirror of other coastal cities. When it got closer, it flooded the buildings, the streets. It added itself to the world. It wrecked it. The inhabitants who saw it approaching remained perplexed observing it, observing themselves. They died of vanity (...) So many times they wanted to loose the ropes of the city. Now they were leaving with it inside a **liquid city.**”*

– **Filipa Leal** (1979 – ), poet from Porto  
translated from *A Cidade Líquida e Outras Texturas* (2006)

*“The **“Liquid City”** is a city where culture and animation help break down boundaries and barriers. It's a city where anything can happen. It is the city of irreverence and unrest. The culture expands and spills over the territories and the population, dissolving prejudices and common places. Everyone is called to the great adventure of the city. Of the city of people, of those who were here and of those who move here. It is a city with self-esteem, with identity, but available for others and for difference. It is a cosmopolitan city but full of race; full of grace.”*

– **Paulo Cunha e Silva** (1962 – 2015),  
Porto's Alderman for Culture in 2013-2015  
translated quote from interview cited in online article



## Chapter 1: Introduction

Porto changed from a *hard* to a *liquid city*. Known by locals as *Invicta* (meaning undefeatable), the name is an allusion to the fact that it was the birthplace of important revolutions, becoming famous for its impenetrable character. It remained so until 2001, a year that many believe was the turning point, when the city was European Capital of Culture. However, it was not until more recently that it became the buzzy destination of today. Its once well-preserved traditions are now being challenged by new fluxes of culture and people, all trying to coexist. This is shaping a new phase of fast progress after intense years of crisis, during which emigration and unemployment skyrocketed. The expression *liquid city* illustrates well the divide among the local population, between those who feel threatened, sharing the negative view of Zygmunt Bauman (2013), sociologist who introduced the term, and those who see it as a place of new opportunities and constant change, metaphorically described as such by Paulo Cunha e Silva, the popular alderman for culture who suddenly died in 2015.

Meanwhile, entrepreneurship became a strategic priority of policymakers in the territories where Porto is embedded, arguably motivated by economic recession as a solution to unemployment. In addition, numerous reports have repeatedly highlighted the potential of cultural and creative entrepreneurship as a key economic driver, promoting desirable spillover effects on other activity sectors in terms of creativity and innovation (e.g. Report of THE OMC, 2018). The region of Porto has a long reputation as a strong cultural and creative cluster in the national context, an idea which became concrete with a study from 2008 promoted by Serralves (2008). Influential players based in the city, this private foundation has launched different initiatives, including the country's most important contemporary art museum, the Creative Industries National Award and a creative industries incubator. They are just one among many interrelated actors and factors which seem to have influenced the evolution of the sector.

A theoretical concept which inherently describes these interactions from a holistic perspective is entrepreneurial ecosystem. According to this approach, successful entrepreneurship is not only the result of entrepreneurs' individual

characteristics, such as personality traits. Instead, entrepreneurship is seen as a process emerging from the interaction between entrepreneurs and the surrounding environment. This perspective has gained supporters over the last decades, reflected on the increasing number of publications using the approach. Despite this, recent publications criticize earlier studies for taking “a static approach to the study of entrepreneurial ecosystems, ignoring both their origins and stimulus and also the processes by which they become self-sustaining” (Mason & Brown, 2014, p.1). A new trend of authors focusing on solving these misconceptions, by recognizing their evolutionary dynamics, suggests that more research is necessary to improve a popular yet empirically underdeveloped approach.

Entrepreneurial ecosystems can be bounded, although not confined, to a specific industry sector and geographical scale (Mason & Brown, 2014). Despite much attention has been given to the study of cultural and creative industry clusters and entrepreneurial ecosystems, literature using the latter to study cultural and creative entrepreneurship on a regional scale is scarce. One possible explanation for this apparent gap in literature is the difficult practical implementation of the entrepreneurial ecosystem approach. In the case of cultural and creative entrepreneurship, the difficulty increase since it deals with several concepts which have disputed definitions. Nevertheless, the increasing popularity of both phenomena suggests promising results which may be enough to overcome the limitations, for instance the transfer of responsibility from policymakers to entrepreneurs as core actors (Stam, 2015).

Hence, the question guiding this research is *how has Porto’s cultural and creative entrepreneurial ecosystem evolved since 2008?* This study aims to explain the evolution of cultural and creative entrepreneurship in Porto as the result of interactions between entrepreneurs and the elements of the entrepreneurial environment over time. Special attention to overcome the limitations of previous studies will be given, as they have failed to provide a clear reasoning between cause and effect among the different elements and ignored the evolutionary dynamics of ecosystems, providing poor insights for policymakers and entrepreneurial leaders (Stam, 2015; Mack & Mayer, 2016). Therefore, the first objective is to analyze the interactions between the main actors and factors of Porto’s cultural and creative

entrepreneurial ecosystem. The second objective is to describe and possibly explain its evolution, by triangulating secondary data from literature with the individual experiences of selected key actors, namely entrepreneurs and experts.

This will be done by the means of an embedded case study, as it allows to include multiple units of analysis in a single-case with unique characteristics such as Porto (Yin, 2017). Following the recommendations that entrepreneurial ecosystems require collecting the perspectives of different stakeholders, qualitative semi-structured interviews to entrepreneurs and experts will be conducted. Furthermore, case studies should rely on multiple sources of evidence (Yin, 2017) and “both quantitative and qualitative research” (Bryman, 2012, p.68). This will be taken into consideration by triangulating the perspectives of entrepreneurs with those of experts, with a more impartial view, and these two with quantitative data from reports. However, complex systems cannot be effectively assessed using simple count-based metrics (Roundy et al., 2018). Also, “cities mainly collect quantitative impacts” and there is the need to “collect more personal stories and experiences” (Culture for Cities and Regions, 2017, pp.19-20).

This paper is structured as follows: first, a theoretical framework of a cultural and creative entrepreneurial ecosystem is built by reviewing literature from different disciplines in Chapter 2. Then, the case of Porto and some events which might have particularly contributed to the sector’s development are introduced, as well as the research expectations. In Chapter 4, the steps of the methodology underlying this study are explained. Chapter 5 contains the results from the analysis of collected data to meet the research objectives. To conclude, in Chapter 6 the results are shortly discussed and the research question is answered accordingly. The conclusion also includes theoretical and practical implications which can be relevant for scholars and policymakers, as well as the limitations of this research.

## Chapter 2: Entrepreneurial ecosystem

### 2.1. Defining entrepreneurial ecosystem

It is virtually impossible to find a single definition in literature to date which applies to every case where the term entrepreneurial ecosystem has been used, given the complexity of elements involved, discrepancy of phenomena described by researchers and their underlying intentions. What they seem to have in common is that they all refer to something related to entrepreneurship, “process in which opportunities for creating new goods and services are explored, evaluated and exploited (Shane & Venkataraman, 2000, as cited in Stam, 2015, p.3) and innovation (Schumpeter defines entrepreneurship as “the process by which individuals exploit opportunities for innovation”, as cited by Stam, 2015, p.3), although with diverging perspectives regarding the territorial boundedness (Acs et al., 2017).

If deconstructed, the term entrepreneurial ecosystem is composed by two words: the first is “entrepreneurial”, referring to entrepreneurial activity (defined below), and the second, “ecosystem”, is a concept originally from ecology which in brief refers to an interdependent relationship between organisms and their habitats. It was imported to entrepreneurship studies because it serves as a useful metaphor to think of entrepreneurship as a systemic process, instead of a result of entrepreneurs’ isolated action. However, it has considerable differences from the biologic term, the most important being that an entrepreneurial ecosystem is an artificial environment mainly resulting from human action (Daniel et al., 2018).

The entrepreneurial ecosystem approach combines aspects of several literature lineages and disciplines: strategic management, regional development (Acs et al., 2017), economic geography, economics, urban and entrepreneurship studies, all combining their efforts to understand the synergies between entrepreneurship and the territory (Mason & Brown, 2014). Researchers who are especially interested in regional development propose a place-based definition (O’Connor et al., 2018), while those focusing on strategic management seem to assume a global context by not referring a specific territory (Zahra & Nambisan 2011, as cited in Acs et al., 2017). More recently, with the global increase of virtual work driven by the rapid progress made in

information and communication technologies (ICT), the concept of entrepreneurial ecosystems based in digital space is also gaining popularity (Sussan & Acs, 2017).

Stam and Spigel (2018), authors of several recent publications on entrepreneurial ecosystems and of important theoretical contributions, propose a definition that seems fitting to a vaster proportion of cases, after critically analyzing different influential publications, therefore used as operational definition in this thesis:

Entrepreneurial ecosystem is a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory (p.1).

To their understanding, productive entrepreneurship, a concept introduced by Baumol in 1990, is more than simple self-employment or pursue of self-fulfillment, both usually included in traditional statistics. Instead, it is the share of total entrepreneurial activity that creates most significant aggregate welfare increases.

Entrepreneurial activity as a whole is “the process by which individuals create opportunities for innovation” (Stam & Spigel, 2018, p.3). This includes all forms of entrepreneurship, such as failed start-ups, nonetheless perceived as important contributes to future developments. Productive entrepreneurship, as a result of a combination of interdependent actors and factors, is mainly attributed to innovative start-ups, high-growth start-ups and entrepreneurial employees. The central actor, although not isolated, of productive entrepreneurship is the ambitious entrepreneur, “an individual exploring opportunities to discover and evaluate new goods” (Stam, 2015, p.8). This type of entrepreneur is more dedicated to performing well, more likely to achieve substantial firm growth, innovation or internationalization than other entrepreneurs (Stam, 2015).

The rapidly growing popularity of the entrepreneurial ecosystem approach reflects the increasing interest of both businesses and governments to stimulate entrepreneurship and innovation by improving their context (Acs et al., 2017). These are arguably the most valuable contributes of this approach: a shift in perspective from individual to systemic performance, acknowledging otherwise ignored positive contributes (Stam & Spigel, 2018); from quantity to quality of entrepreneurship, since policymakers and business experts are now prioritizing innovation, growth-oriented (Stam & Spigel, 2018) and high-impact (Acs, 2010) entrepreneurship; from a past to a

present and future orientation, considering both potential and existing factors (Mason & Brown, 2014), namely the shift from *successful* to *ambitious* and *productive entrepreneurship* (Stam & Spigel, 2018), embracing their constant evolutionary dynamics (analyzed in detail in Chapter 1.4) (Mack & Mayer, 2016).

## 2.2. From new business formation to entrepreneurial ecosystem

First it is necessary to understand the origins of the concept in order to fully understand its meaning. Until the 1980s, the study of entrepreneurship was mostly focused on the entrepreneur as an isolated actor, for instance related to identifying common personality traits among successful entrepreneurs (Stam, 2015). The first traceable reference to the concept of entrepreneurial ecosystem appears to be a publication dating back from 1988. In a pioneering exploratory study, Valdez (1988) proposes a theoretical framework to describe the process of new business formation, adapting the ecosystem model rooted in biological sciences, namely the branch of ecology. Originally, ecosystem referred to the complex of organisms and their environment interacting as a unit. As it happens with other organisms, human behavior is a result of the interaction between the individual and the respective surrounding environment.

Likewise, he introduces the entrepreneurial ecosystem model to explain the process of new business formation as embedded in a certain environment. Then, he identifies the entrepreneur and the entrepreneurial environment as the two basic elements of an entrepreneurial ecosystem. Despite this apparently simplistic dichotomy, Valdez (1988) lists the building blocks of what he considers an entrepreneurial environment (p.103):

- |  |   |
|--|---|
| 1) Venture capital availability          | 7) Proximity of universities            |
| 2) Presence of experienced entrepreneurs | 8) Availability of land or facilities   |
| 3) Technically skilled labor force       | 9) Accessibility to transportation      |
| 4) Accessibility of suppliers            | 10) Receptive population                |
| 5) Accessibility of customers            | 11) Availability of supporting services |
| 6) Favorable governmental policies       | 12) Attractive living conditions        |

In order to show how the listed resources and personal characteristics are interrelated, he draws “an ecosystem model” to illustrate the process of new business formation, as shown below (Figure 1):

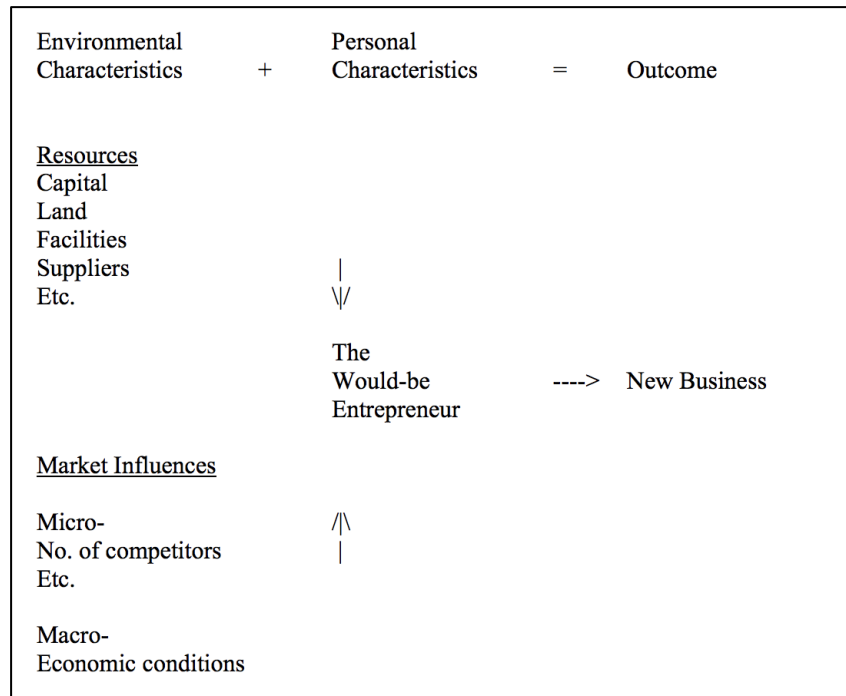


Figure 2: New Business Formation, An Ecosystem Model (Valdez, 1988)

Between Valdez’s publication in 1988 and 2006 there seems to be a gap in research using the exact term “entrepreneurial ecosystems”, although other prominent studies using identic concepts emerged. Moore introduced the popular concept of business ecosystem in the 1990s, using a similar definition (Nambisan & Baron, 2013). Cohen (2006) cites a few important, closely-related studies from that period, despite using slightly different names. In 1996, Spilling refers to the concept of entrepreneurial system with an identic definition, in a study on entrepreneurship in the context of a mega-event, after observing industrial changes related to the 1994 Olympic Winter Games in Lillehammer, Norway. His study stresses the importance of entrepreneurial systems as motors for regional economic development. Later, a publication by Esty and Porter in 1998 on “industrial ecology and competitiveness” with a similar direction, even though their unit of analysis was firms instead of individual entrepreneurs. They supported that there can be environmental factors, such as regulations, supporting innovation, which can result in important competitive

advantages, such as lower production costs and higher product differentiation<sup>1</sup> (Cohen, 2006).

Neck et al. (2004) are pioneers in examining the interaction of multiple components of these systems in a holistic manner, having a collective influence on the development of clusters in a region. This study also shows the importance of the systemic conditions to attract entrepreneurs and consequent new venture creation (Neck et al., 2004). In another study, also analyzing a particular region, Cohen (2006) focuses on the issue of sustainability, more specifically the role of each component previously identified by Neck et al. (2004) in the sustainability of entrepreneurial systems. He recommends further research on the interdependence of these components, on their individual degrees of influence in the system and a longitudinal approach to examine chronological developments (Cohen, 2006).

Since 2010, the topic of entrepreneurial ecosystems has become particularly popular, as it is also the period registering the highest concentration of publications. Isenberg, founder of the Babson Entrepreneurship Ecosystem Project, is often coined to having triggered this later trend with his publication (Isenberg, 2010). He became one of today's most influential authors and advocate of the importance of entrepreneurial ecosystems in fostering innovation and economic growth. This trend was consolidated by Feld's 2012 book based on his experience at Boulder (the same community analyzed in Neck et al (2004), considered a flagship example of a successful entrepreneurial ecosystem, next to Silicon Valley and Boston's Innovation District).

However, these and other influential publications are mostly aimed at providing practical advice to a professional audience and do not always follow an academic methodology, raising questions about their theoretical contribution, especially to the cause-and-effect relationships (Stam, 2015). Nonetheless, Isenberg (2010; 2011) compiles a series of practical recommendations for policymakers to maximize entrepreneurial potential, based on best practices from various case studies. Furthermore, he warns readers about the dangers of trying to copy the model of Silicon Valley, by identifying its characteristics and trying to create a similar artificial environment somewhere else. This can lead to unexpected results because every

---

<sup>1</sup> Note: Porter becomes later one of the key scholars of cluster theory.



ecosystem is embedded in a specific context, with its own particular influencing factors, some of which are beyond human control. Lastly, he exemplifies how ignoring the interconnected character of the different ecosystem domains can also lead to negative results:

Encouraging young people to have entrepreneurial aspirations, for example, can have a boomerang effect and cause brain drain if those aspirations are foiled by a hostile environment (Isenberg, 2010, p.10).

He then introduced a model containing similar domains, with minor differences and more detailed, to the resources initially identified by Valdez (1988), and to those identified in more recent publications (Stam, 2015): policy (government, leadership), finance, culture (success stories, societal norms), supports (infrastructure, support professions, non-government institutions), human capital (labor, educational institutions), markets (networks, early customers) (Isenberg, 2011).

More recently, there are some scholars whose contributes to theory deserve special consideration. Mason and Brown (2014) are the authors of a path-breaking background paper prepared for the OECD, which summarizes most important findings in previous entrepreneurial ecosystems and growth-oriented entrepreneurship research, following a rigorous academic methodology. It appears to be the first paper of its kind providing a comparative overview of different related research topics, as well as a well-thought structure which seems to have inspired later publications like this one. Focusing on entrepreneurial ecosystems' evolutionary dynamics and interactions, Mack and Mayer (2016) claim to have made "a distinct improvement over static approaches that provide a list of ingredients with no sense of their relative importance over time" (p.1). Stam (2015; 2018), Stam and Spigel (2018), Acs et al. (2017) and O'Connor et al. (2018) have also dedicated a great part of their academic career researching entrepreneurial ecosystems. They have been especially active in the last few years, with an extensive bibliography on the topic and introducing many fresh insights which support the potential of high-impact entrepreneurship.

### 2.3. Related theories and concepts of regional development

There are several theories and concepts from the family of regional development closely related to entrepreneurial ecosystems. Because it is an academically

underdeveloped approach, it is important to acknowledge the decades of research conducted on related theories and concepts with valuable contributes to the understanding of entrepreneurial ecosystems (Stam & Spigel, 2018). Most likely due to the complex, multi-level nature, many studies result in long lists of relevant factors without a clear reasoning of cause and effect, providing poor insights for policymakers and entrepreneurial leaders (Stam, 2015; Mack & Mayer, 2016). Paradoxically, popular literature (such as Isenberg, 2010; and Feld 2012, as cited in Stam, 2015) addresses those same stakeholders. Clusters (regional and industrial), innovation systems and industrial districts are among the most commonly referred related theories and concepts of entrepreneurial ecosystems (Mason, Brown, 2014; Acs et al., 2017; O'Connor et al., 2018).

(Industrial) clusters share many characteristics with entrepreneurial ecosystems. Several authors coin the concept to Michael Porter with a first publication in 1988. The analysis of clusters focuses on the dynamics of competition and collaboration between interconnected firms in one particular geographic area (from the same industry or with common characteristics). Clusters are regarded as a (naturally) desirable and efficient solution for new business formation, as it is easier for interconnected firms to access a common pool of labor with industry-specific expertise, as well as where important knowledge spillovers between firms and education institutions happen. Innovation systems are a less popular concept, nonetheless highly related, used to explain the process of innovation and its contrasts across regions. Innovation is perceived as a systemic process resulting from different knowledge streams. The analysis is focused on the flux of information between agents through social networks on a large scale beyond the studied territory. When used with a regional focus, this approach also studies the influence elements, like availability of capital and labor, and the impact on innovation (Spigel & Harrison, 2018). Industrial districts are an older concept which first emerged in the 1920s and became popular again later in the 1990s. They focus on the relationship between the distribution of labor by industry in a certain location, the interactions between firms and society, internationalization and regional economic growth. Later developments of the theory in the 1990s added the role of the local government through policy (Stam & Spigel, 2018).

The main similarity between entrepreneurial ecosystem and these concepts (clusters, innovation system and industrial district) is that they all recognize the influence of an external business environment in fostering entrepreneurship (Stam, Spigel, 2018) and the benefits of co-creation (Christos, 2012). On the other hand, the main difference is that entrepreneurial ecosystems focus on the entrepreneur as core actor, rather than firms or organizations, supported by that external environment. Policymakers and other influencing actors are seen as “feeders” (supporters) rather than “leaders” of the entrepreneurship process, ultimately lead by entrepreneurs (“privatization of entrepreneurship policy” (Stam, 2015, p.4)). Stam and Spigel (2018) compile an overview of the most popular related theories and concepts, summarizing and comparing their key characteristics (Table 1).

**Table 2: Differences and similarities between entrepreneurial ecosystems and related concepts (Stam, Spigel, 2018)**

Approach	Industrial district, cluster, innovation systems	Entrepreneurial ecosystem
<b>Main focus</b>	Main focus is on economic and social structures of a place that influence overall innovation and firm competitiveness. In many cases, little distinction made between (fast-growing) start-ups and other types of organizations.	Start-ups explicitly at centre of ecosystem. Seen as distinct from established large firms and (lower-growth) SMEs in terms of conceptual development and policy formation.
<b>Role of knowledge</b>	Focus on knowledge as source of new technological and market insights. Knowledge from multiple sources is recombined to increase firm competitiveness. Knowledge spillovers from universities and other large research intensive organizations are crucial.	In addition to market and technical knowledge, entrepreneurial knowledge is crucial. Knowledge about the entrepreneurship process is shared between entrepreneurs and mentors through informal social networks, entrepreneurship organizations and training courses offered.
<b>Locus of action</b>	Private firms and state form primary locus of action in building and maintaining industrial district/cluster/innovation system. Little room for individual agency in their creation.	Entrepreneur is the core actor in building and sustaining the ecosystem. While state and other sources might support ecosystem through public investment, entrepreneurs retain agency to develop and lead the ecosystem.

## 2.4. Elements and interactions

Entrepreneurial ecosystems are complex, multi-level systems formed by various components and relationships of cause and effect. Since 1988 until today (Valdez, 1988; Stam, Spigel, 2018), these have remained surprisingly identical, despite minor differences such as the word used by scholars when addressing them: resources (Valdez, 1988), attributes, domains (Feld 2012; Isenberg, 2011, as cited in Stam, Spigel,

2018), pillars (World Economic Forum), determinants (Ahmad & Hoffmann, 2008; KEA 2009). In a constructive synthesis, Stam (2015) proposes a new model showing not only the elements but also the *modus operandi* of entrepreneurial ecosystems, present in other recent publications (O'Connor et al., 2018; Stam & Spigel, 2018).

In this model (Figure 2), with causation happening upwards, those same components, named “elements”, are sub-divided in framework and systemic conditions. Framework conditions (formal institutions, culture, physical infrastructure and demand) are the foundation of the ecosystem and have a more permanent character. Systemic conditions (networks, leadership, finance, talent, knowledge and support services/intermediaries) are considered to predominantly determine the success of entrepreneurial ecosystems and are also the ones where policy can have a more immediate effect. Combined, these elements, or framework and systemic conditions, will lead into entrepreneurial activity as the output, where productive entrepreneurship is part of total entrepreneurial activity and responsible for the most significant welfare increases. Entrepreneurial activity (which also includes non-productive entrepreneurship, like failed start-ups) leads to aggregate value creation as the outcome of the entrepreneurial ecosystem. Entrepreneurial activity (output) and aggregate value creation (outcome) feed back into the systemic conditions, interconnected with framework conditions. The links between the different elements represent their interactions (Stam, 2015), which can be internal, i.e. within the ecosystem, or external, i.e. with the outside of the ecosystem.

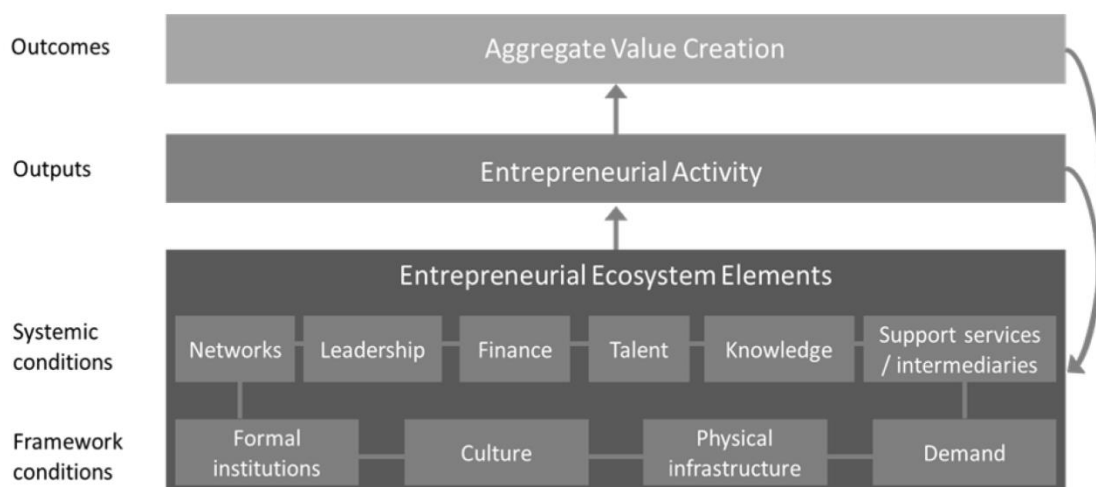


Figure 3: Key elements, outputs and outcomes of the entrepreneurial ecosystem (Stam, 2015).

To illustrate these internal and external interactions more precisely, an older model originally conceived for clusters but which also applies to entrepreneurial ecosystems is represented below (Figure 3) (Bathelt et al., 2004). The grey area represents the entrepreneurial ecosystem, which can be “geographically bounded but not confined to a specific geographical scale (e.g. campus, city, region)” (Mason & Brown, 2014, p.5). The black circle represents the defined territory, depending on the context of analysis (like campus, city, region). The black dots represent the different elements (actors and factors), the dashed black arrows represent a network of interactions between elements inside the ecosystem and the white arrows represent the interactions between the inside and outside of the ecosystem.

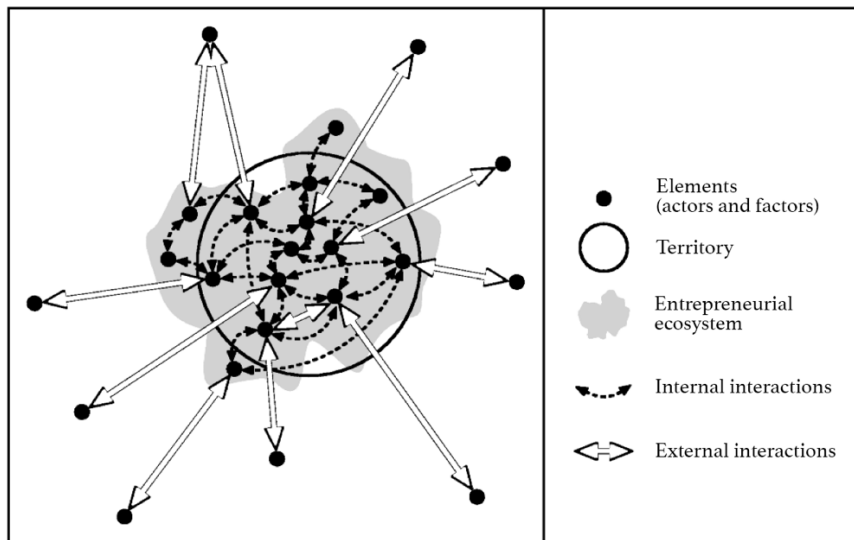


Figure 4: Entrepreneurial ecosystem interactions  
(own elaboration, adapted from Bathelt et al., 2004)

Other commonly studied interactions between agents in regional industrial clusters (Acs et al. 2017), and instinctively also present in network models like entrepreneurial ecosystems, are collaboration and competition. Both seem necessary to survive in growingly saturated markets, often characterized by oversupply, scarce resources and lower market entry barriers since digitization became a global phenomenon. In a recent study, Sonenshein et al. (2017) concluded that, conversely to past research, these dynamics lead to “three surprising consequences on strategic groups” (p.1), all strong arguments for the benefits of clustering:

- (1) existing members of the strategic group help new firms enter the market;
- (2) resource scarcity leads to cooperation, not competition;
- (3) when competition does emerge, it focuses on status within the group and not on price.

In other words, the three points highlight the benefits of clustering, since the only possible downside is competition for a certain status among their peers (3), for example being shadowed by a more successful entity providing a similar product or service. On the other hand, being exclusive in one area can also translate in higher costs by the lack of existing support through cooperation (2) and lack of an existing local demand for that product or service (1). With a similar concept, another recent study suggests that diversity and coherence are necessary tensions in entrepreneurial ecosystems and that ecosystems ideally reach an optimum balance between high diversity while still coherent (Roundy et al., 2017).

Reflecting on the degree of mutual dependence between elements of entrepreneurial ecosystems, scholars' position seems inconsistent. Stam and Spigel (2018) assertively affirm the existence of an *interdependent* relationship between actors and factors in their definition. Other scholars, particularly from cluster theory, implicitly take a more neutral stance by describing them as possible "interactions" and supporting their considerable advantages, without mentioning it as a necessary condition (e.g. Mason & Brown, 2014).

## 2.5. Evolutionary dynamics, emergence, resilience, sustainability

Recent developments in research stress that entrepreneurial ecosystems are naturally in constant evolution. As Mason and Brown (2014) stated, earlier "studies have tended to take a static approach to the study of entrepreneurial ecosystems" (p.1), as a "phenomenon that can be captured, like a picture, by a snapshot at a given point in time" (p.26) and "largely ignoring both their origins and stimulus and also the processes by which they become self-sustaining" (p.1). Christos (2012) argues that thinking in terms of an entrepreneurial ecosystem instead of cluster can provide a better explanation for the emergence, evolution and co-evolution, as it incorporates important logics of strategic management and entrepreneurship which seem to be missing in cluster theory, notably the role of markets and ecosystem co-creation. Because of their dynamic nature, entrepreneurs need certain skills in order to "survive and thrive" (Nambisan & Baron, 2013, p.23). The evolutionary perspective is valuable because it provides a sense of how history, culture and the institutional setting impact the entrepreneurial ecosystem (Mack & Mayer, 2016).

Mack and Mayer (2016) seem to have been the first to propose a clear framework for the entrepreneurial ecosystem life cycle (Figure 3), divided in four stages: birth, growth, sustainment and decline. They then describe how each of the fundamental domains proposed by Isenberg (2011), or elements (Stam, 2015), evolve during the four stages. They claim that these are useful benchmarks for determining the stage of development of one or comparing ecosystems around the globe, even if having unique characteristics. For instance, looking at the evolution of “policy” over the four stages, in the “birth” stage, policy is not yet oriented towards entrepreneurship, and is instead still oriented towards traditional economic development like firm attraction and retention. In the “growth” stage, regional policymakers start realizing the importance of building an entrepreneurial ecosystem and start developing policy supporting entrepreneurship. In the “sustainment” stage, policy is critical for the ecosystem survival, while in the “decline” stage, leadership starts shifting their focus from entrepreneurial ecosystems to other types of economic development. According to this figure, the stage with the most visible favorable developments for entrepreneurship to succeed is growth: higher rate of firm births than deaths (both increasing over time), easier access to finance, higher chances of internationalization, entrepreneurship education becomes available, among other forms of support. Brown and Mason (2017) distinguish an embryonic ecosystem from a scale up ecosystem by characterizing the two typologies.

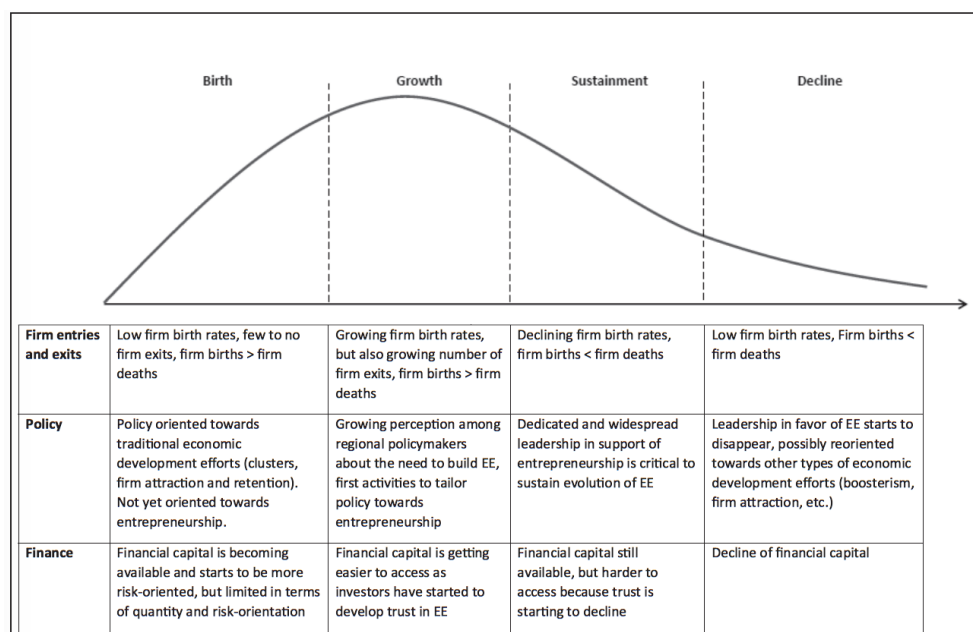


Figure 4: Evolution of entrepreneurial ecosystems (excerpt, Mack & Mayer, 2016)

A conclusion of the study was that the entrepreneurial ecosystem of Phoenix was the result of a top-down (“boosterism”) policy effort, contrary to other distinct examples like Boulder in Colorado (Mack & Mayer, 2016). When a bottom-up process is more evident, those at the “bottom” position in terms of political power, like entrepreneurs and other civilians, are perceived as having a more significant role in founding the ecosystem, and later capturing the interest and support of policymakers at the “top”. Stam and Spigel (2018) highlight the significant role of local conditions and bottom-up processes in several cases of ambitious entrepreneurship, decreasing the role of governments and policy.

Researchers, backed by (public or private) entrepreneurial leaders who aim to create an ideal environment for entrepreneurship to flourish, are interested in understanding both how and when entrepreneurial ecosystems emerge. Not only they generally emerge in locations that have place-specific assets (Mason & Brown, 2014), but “place-based transitions and transformations is [also] dependent upon anchoring the point of departure” (O’Connor et al., 2018, p.1). A recent theoretical paper focusing on emergence confirms that it results from a combination of entrepreneurs' intentions, coherence of activities, and from resource injections. Therefore, its study requires a multivariate analysis and using mixed methods (qualitative and quantitative) to achieve more robust results. One example is simulating and evaluating different scenarios with the resources of one specific ecosystem through multivariate modelling (Roundy et al., 2018). However, there can hardly be a generalizable rule due to their complex, non-linear evolution and unique nature (Mack & Mayer, 2016). The dangers of making general assumptions based on a few successful cases, without considering local differences, should not be ignored (Isenberg, 2010).

After emergence follow the issues of sustainability and resilience. Cohen (2006) had already dedicated his work to understanding how the different elements of an ecosystem could contribute to its sustainability. More recently, Mack and Mayer (2016) identify it as a critical stage of their life cycle where the action of policymakers seems particularly important to prevent it from declining. While before most efforts were focusing on increasing the number of start-ups, the focus has now changed towards their survival (Stam & Spigel, 2018). Resilience refers to the ability of the ecosystem to adapt in response to disturbances which are caused by changes in



internal or external conditions, also called “endogenous and exogenous shocks” (Spigel & Harrison, 2018). The higher the resilience, the shorter the time of adaptation and the higher the capacity to resist to those changes. Research shows that an ecosystem with an optimum balance of diversity and coherence are more resilient (Roundy et al., 2017).

The diagram below (Figure 5) summarizes and illustrates most transformations discussed so far and their impact on actors and processes. It includes the interactions described in the previous chapter, with more detail regarding the types of actors (e.g. high-growth and anchor firms), and the life cycle with a less linear approach (Mack & Mayer, 2016). While they both show a nascent phase (also birth or emergence) followed by a strengthening (or growth) phase, here the latter can evolve into either a resilient ecosystem or a weakened ecosystem. What originates those differences are the levels of connectivity between ecosystem actors (high = resilient), the maintenance, creation and attraction of resources from inside or outside the ecosystem (if positive = resilient) or, on the contrary, if an internal or external shock has reduced the connectivity between firms and personal networks and caused a decrease of resources (= weakened ecosystem) (Spigel & Harrison, 2018).

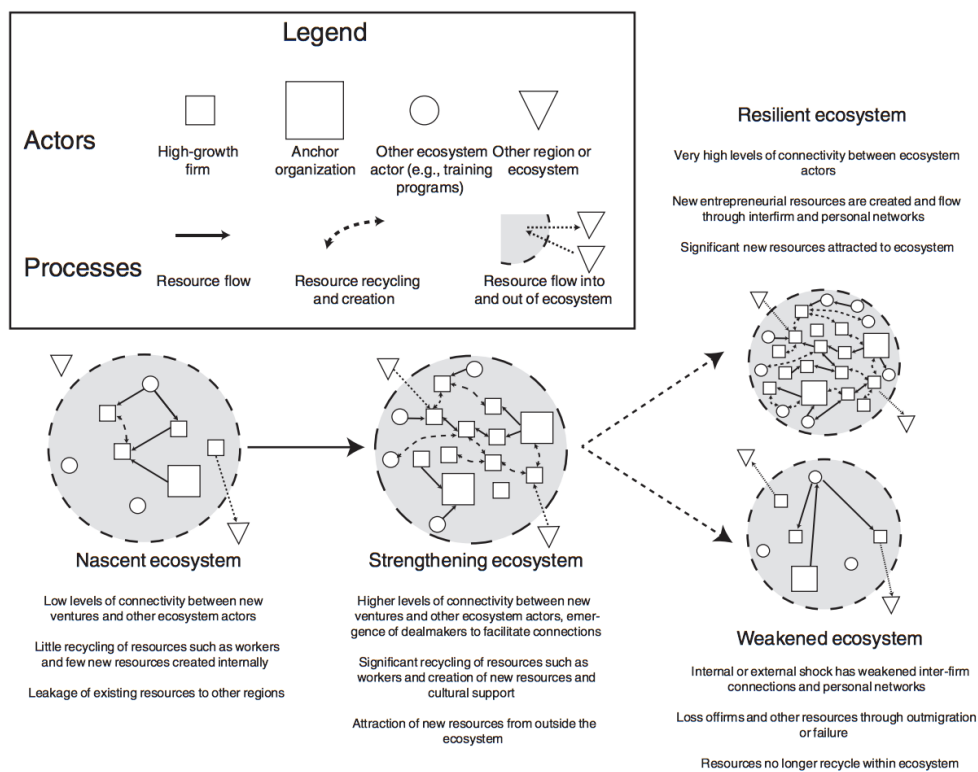


Figure 5: Transformation of entrepreneurial ecosystem (Spigel & Harrison, 2018)

## 2.6. Cultural and creative entrepreneurial ecosystem

Like entrepreneurial ecosystems, culture and creative entrepreneurship have been receiving increasing attention of researchers and policymakers. While the study of cultural entrepreneurship has a long academic tradition (Klamer, 2011), the academic study of creative entrepreneurship, associated with creative industries, only emerged later, coined to Caves with a publication in 2000 (Swedberg, 2006). Before, the UK Department of Culture, Media and Sports (DCMS) had already introduced a definition of creative industries in 1998:

Those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property (Jeffcutt, 2004, p.68)

Their definition includes the following activities: advertising, architecture, the art and antiques market, crafts, design, designer fashion, film, interactive leisure software, music, the performing arts, publishing, software, and television and radio. Hence, they combine different sectors, professions and policy levels, bringing together a complex network of stakeholders (Jeffcutt, 2004).

Because of their increasing significance in fostering creativity and innovation, employability and economic growth, cultural and creative entrepreneurship are now a strategic priority of policymakers worldwide, on different levels of action: local, regional, national and international. Numerous reports since the late 1990s have continuously highlighted their potential, registering a rapid evolution in global employment, turnover and growth (Jeffcutt, 2004). Beyond immediate economic impacts, they are also perceived as drivers of other positive developments such as social cohesion and urban redevelopment (Report of THE OMC, 2018).

### 2.6.1. Industry-specific and place-based conceptual framework

While there is abundant literature on the regional development of cultural and creative agglomerations (clusters), using the entrepreneurial ecosystem approach focusing on cultural and creative entrepreneurship and the urban context seems a rather unexplored approach, although it has been used to study other industry-specific ecosystems such as Silicon Valley (mostly technological industries). Recapturing the words of Mason and Brown (2014):

“Entrepreneurial ecosystems can be industry specific or may have evolved from a single industry to include several industries. They are geographically bounded but not confined to a specific geographical scale (e.g. campus, city, region). And they are not related to particular sizes of city (p.5).”

Jeffcutt (2004) appears to have been the first to introduce a creative industries ecosystem framework and key features. Using Northern Ireland as unit of analysis, without explicitly focusing on entrepreneurship, he illustrates the dynamics between individuals, organizations and the environment as a system and identifies five important conditions for the creative industries: the sector and its infrastructure, government (policy), new and existing creative businesses, improving the supply of new entrants (learning) and developing existing workforce in the sector (opportunities). He recommends further researchers to examine knowledge networks and transactions, which are “glocal” (= local but operate globally), constantly evolving and embedded in a wider context. The fact that boundaries between industries and sectors are blurred with the use of technology is also mentioned in his study.

Scott (2006) proposes the similar concept of “creative field”, where creativity and innovation are interrelated with specific geographical and historical conditions. In a scheme, he represents its network elements and transactions, as well as vertical and horizontal developments. In a later publication, he defines four major components of the creative field in the case of a city (Scott, 2010, p.1):

- (a) intra-urban webs of specialized and complementary producers;
- (b) the local labor market and the social networks that bind workers together in urban space;
- (c) the wider urban environment (including various sites of memory, leisure, and social reproduction);
- (d) institutions of governance and collective action

In a different study on the drivers and processes of creative industries in cities and regions, Chapain and Propriis (2009) identify three main drivers: the “creative class” (a concept coined to Florida), cultural and creative clusters, and business support-infrastructure. KEA European Affairs<sup>2</sup> (KEA, 2009) proposed a model called “six pillars

---

<sup>2</sup> a research and consultancy firm from Brussels, specialized in the cultural and creative industries, operating internationally since 1999 and author of several reports addressing policymakers like the European Commission and city councils.

of creativity”, with identical elements to the models of Isenberg (2011) and Stam (2015). In a later publication from 2013, a similar model of the cultural resources in cities supports that they are key for a creative ecosystem, including “creative people and ideas”, “artistic traditions and know-how”, “creative management” and “conviviality and fun” (KEA 2013, as cited in Culture for Cities and Regions, 2017, p.10).

Selada et al. (2012) then propose a conceptual model for creative-based strategies in small and medium-sized cities, concluding that “local leaders can be promoters or facilitators of the development of *creative ecosystems*, if they are proactive, future-oriented, and embrace institutional change for development” (p.8). They also illustrate how the Portuguese city of Óbidos is embedded in the surrounding territory (Figure 6).

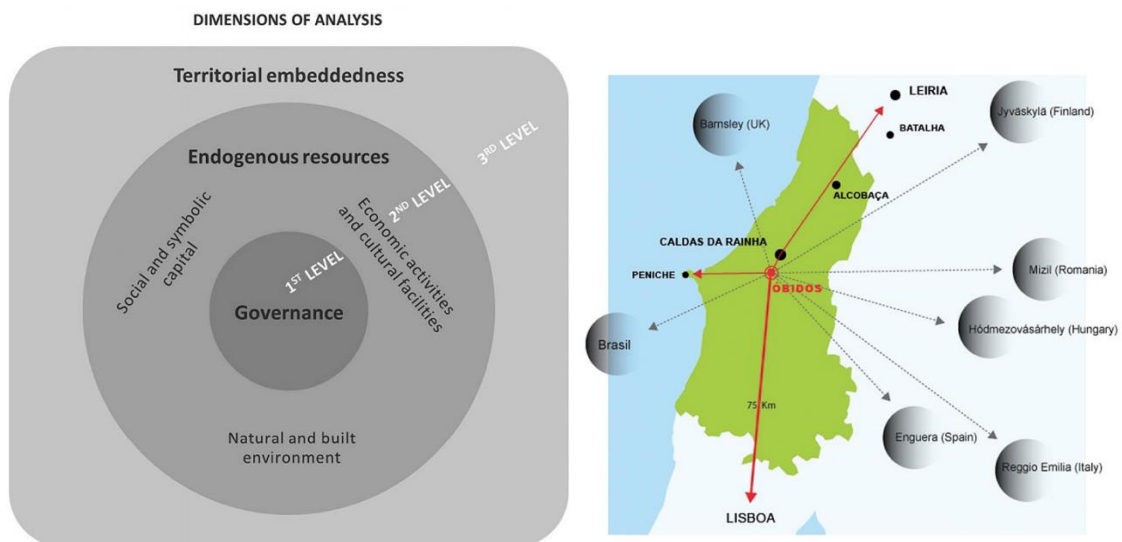


Figure 6: Creative-based strategies in small and medium-sized cities – a conceptual model (left) and Óbidos' territorial embeddedness (right) (Selada et al., 2012)

A divide between bottom-up and top-down processes emerges from studies on the evolution of cultural and creative clusters, emphasizing the role of public and private institutions at its different stages (Chapain & Propriis, 2009). Wondering “whether industrial agglomeration is an effect of producers’ search for creative synergies, or whether such synergies are themselves simply a contingent outcome of agglomeration” (p.1), Scott (2006) concludes that it is impossible to provide a general answer, contradicting those who believe that the region is the primary factor of agglomeration.

The conceptual framework of an industry-specific and place-based entrepreneurial ecosystem below was developed (Figure 7), extending on the entrepreneurial ecosystem framework proposed by Stam (2015), described in detail in Chapter 2.4. It adds important missing elements mentioned throughout this chapter (entrepreneurs as central actors: Stam & Spigel, 2018; the concept of entrepreneurial environment introduced by Valdez (1988); time frame due to evolutionary dynamics: Mack & Mayer, 2016; industry or sector and territory boundaries: Mason & Brown, 2014) and it is in line with the models proposed by different authors cited in this section (Jeffcutt, 2004; Scott, 2006; 2010; Chapain & Proprius, 2009; KEA 2009; 2013; Selada et al., 2012). While the industry and territory may overlap, this is not a necessary condition. The interrupted limits represent flexible borders, adaptable to the desired unit of analysis. The elements of the entrepreneurial environment are further described in Table 2 below.

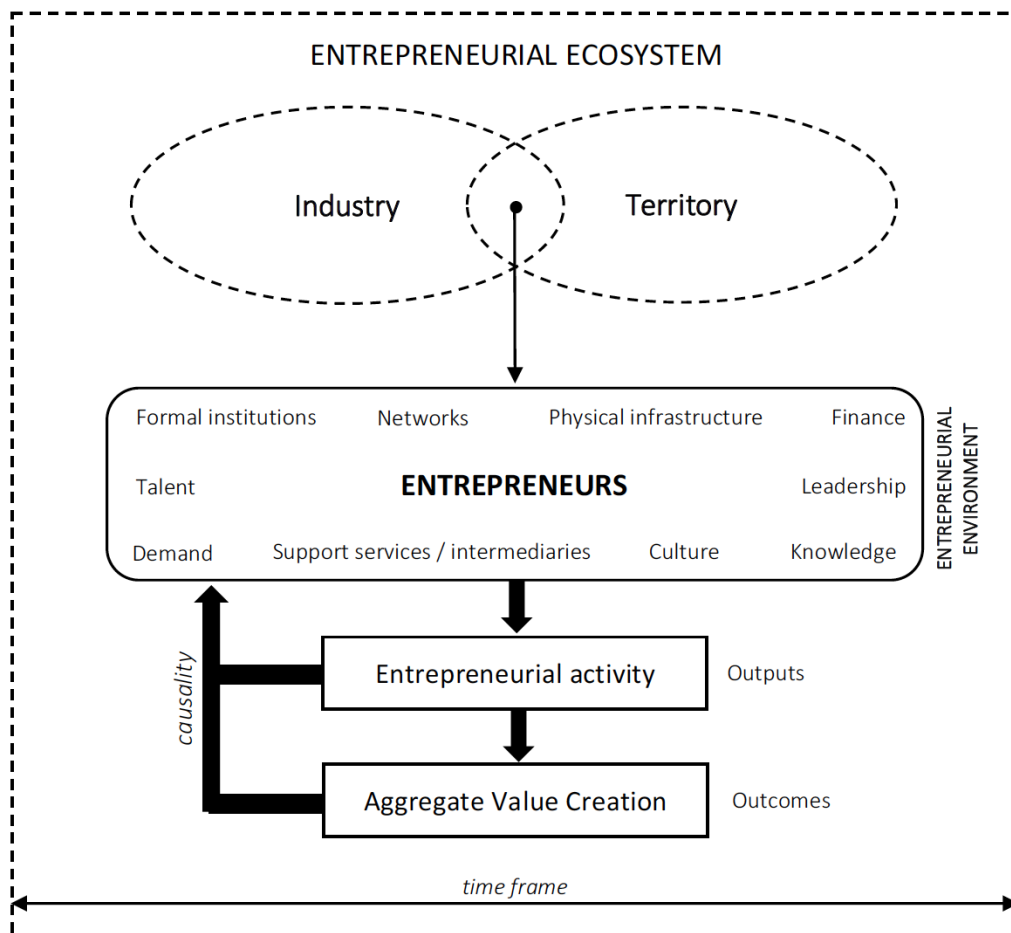


Figure 7: Conceptual framework of an industry-specific and place-based entrepreneurial ecosystem  
 Source: own elaboration, adapted from Stam (2015), ----- = flexible borders

*Table 2: Elements and key actors and factors of the cultural and creative entrepreneurial environment (own elaboration, adapted from Stam, 2015)*

<b>Elements</b>	<b>Key actors and factors</b>
<b>Leadership</b>	Successful and influential entrepreneurs, corporations, private institutions, governments, policymakers, policy (local, regional, national, international)
<b>Finance</b>	Public (subsidies, funding programs), private (sponsors, investors, credit), awards (competitions, merit)
<b>Talent</b>	Employees, colleagues, alumni, students, unemployed, expatriates
<b>Demand</b>	Profile of consumers, users, audience (age, profession, origin)
<b>Networks</b>	Collaboration, formal (memberships, partnerships) or informal (family, friends, acquaintances)
<b>Physical infrastructure</b>	Transports, buildings (real-estate, venues), telecommunications
<b>Support services / intermediaries</b>	Incubators, co-working spaces, NGOs, agencies, information sites (online and offline), databases, consultancy and advisory
<b>Culture</b>	Values, mentality, tradition, historical background, tolerance of failure, social status of entrepreneurs
<b>Formal institutions</b>	Legal and tax systems (“bureaucracy”)
<b>Knowledge</b>	Universities, schools, museums, libraries, R&D, knowledge-transfer centers
<b>Territory</b>	Geographic position (absolute and relative), area, distances, weather conditions, demographics, branding
<b>Industry</b>	Peers, suppliers, saturation (competition), market, regulations
<b>Quality of life</b> ( <i>OECD Better Life Index</i> )	Work-life balance, social welfare, healthcare, leisure activities, purchasing power, housing, safety, happiness

### 2.6.2. Cultural and creative entrepreneurs

Departing from the definition of entrepreneurship by Shane and Venkataraman (as cited in Stam, 2015), an entrepreneur can be defined as someone who explores, evaluates and exploits opportunities for creating new goods and services. Cultural and creative entrepreneurs are those entrepreneurs active in the cultural and creative sector, which include arts, cultural activities and industries, and creative industries and activities (Table in Appendix B).

There are international differences regarding the categorization of cultural and creative activities. The UK’s DCMS combines both in one big group of *creative industries* (based on creativity, knowledge, intellectual property), also referred as creative economy (Henry, 2007). Governments of other countries, like Germany and France, believe it is important to distinguish between what is cultural and what is

creative, as well as what is industrial (i.e. reproducible) and what is not. The lack of distinction could explain why cultural and creative entrepreneurs struggle with their entrepreneurial identity, oftentimes disregarding themselves as entrepreneurs and avoiding acting entrepreneurially (Werthes et al., 2018). The differences can be considerable, e.g. between an entrepreneur who starts a theatre group, with limited capacity of supply (also known as *Baumol's cost disease*), or an entrepreneur who starts a software business based on cultural inputs, like a streaming service (profit-oriented and reproducible).

Moreover, not distinguishing between cultural and creative activities has also important policy implications, for instance when defining the eligibility of activities for public subsidies (Garnham, 2005; Galloway & Dunlop, 2007). Throsby (2008) argues that the *concentric circles model of the cultural industries* offers a clearer division between the different activities in the cultural and creative sector: “cultural content of the output of the cultural industries declines as one moves outwards from the core” (p.1). Based on the same model, KEA (2006) proposed a more detailed framework (see adapted version, Appendix B), listing common characteristics and examples of activities for each dimension, although acknowledging that some activities do not fall into a single category and may combine characteristics from different sectors, demanding categorization on a case-by-case basis.

Lastly, the entrepreneurial ecosystem approach considers the entrepreneurship process as an interaction between individual entrepreneurs and the surrounding environment. Therefore, even though not isolated, individual personality (e.g. risk-taking, self-confidence, optimism, ambition) and cognitive factors (such as knowledge from education, experience and background) also play an important role in determining the performance of entrepreneurial activity (Jeffcutt, 2004).

### 2.6.3. Cultural and creative entrepreneurial environment

Entrepreneurs are surrounded by the entrepreneurial environment, composed by interrelated elements. Each of these elements includes several actors and factors (Stem, 2015). Based on literature discussed so far, some key interacting actors and factors of the cultural and creative entrepreneurial environment were listed in Table 2.

“Leadership” are those actors and factors directing the course of the ecosystem. Policy and other decisions which affect the ecosystem are not only a responsibility of public leaders (governments, policymakers), but also private leaders, such as influential entrepreneurs and large private institutions. “Finance” refers to the availability of public or private capital, which in the cultural and creative sector comes mostly from: subsidies, funding programs, open calls, sponsors, investors, credits, personal savings, family, friends, awards from competitions or merit prizes. “Talent” refers to current or potential workers, collaborators or partners (human capital). These can be graduates from education institutions, expatriates living in that area or willing to reallocate, colleagues or unemployed. “Demand” refers to the characteristics of consumers or audience. “Networks” includes formal (through a contract, a membership or a partnership) and informal networks (family, friends, acquaintances). It is also where collaboration emerges. “Physical infrastructure” includes things like modes of transport, buildings (real-estate, venues) and telecommunications. “Support services/intermediaries” includes all those services which can help the performance and promote synergies among entrepreneurs. These can be incubators or accelerators, co-working spaces, related NGOs or agencies, consulting firms and information sites (online and offline). “Culture” refers to the perceived social status of entrepreneurs, tolerance of failure, traditions, mentality and values, which are linked to the historical background. “Formal institutions” refers to the official rules and practices of the place, often called “bureaucracy”. It includes legal and tax systems. “Knowledge” refers to all entities producing knowledge, that is education institutions (universities, schools, training centers), but also museums, libraries, research and development and knowledge-transfer centers.

Apart from these, industry-specific and place-based ecosystems have additional conditions which will affect and be affected by entrepreneurship: territory, industry and quality of life (Scott, 2010; Mason & Brown, 2014). In “territory” play a role factors like the absolute and relative geographic position, distances, the size of the area, weather conditions (if applicable, mostly for outdoor activities), demographics and the branding of that region. In “industry” there are actors and factors like peers, suppliers, market forces, saturation, leading to competition, and regulations. Although some scholars integrate “quality of life” in the previous conditions, it shall be considered as a



separate category since it focuses on aspects of the private life of the entrepreneurs, while the others can be seen as work-related conditions.

## 2.7. Concluding remarks

Along this chapter, literature of entrepreneurial ecosystems and cultural and creative entrepreneurship has been reviewed in order to construct the theoretical framework of a cultural and creative entrepreneurial ecosystem, the main subject of this study. A conclusion regarding entrepreneurial ecosystem theory is that, despite popular, there are few studies considering its interactions and evolutionary dynamics. Earlier studies have simply identified their elements without explaining how these interact, or have ignored their evolutionary dynamics by studying these as static at one point in time. Both problems have been addressed in more recent studies, which have made important contributes in solving these misconceptions. Further empirical evidence focusing on these aspects is essential to complement abundant conceptual literature.

Concerning cultural and creative entrepreneurship, the conclusion is that policymakers seem more interested than ever in fostering a favorable environment for their growth, aware of their positive spillover effects on the economy in general. This might explain why so much attention has been dedicated to studying the formation of cultural and creative industry clusters. Curiously, it is hard to find literature applying the concept of entrepreneurial ecosystem to the study of cultural and creative activities on a regional scale. The main difference is the shift from organizations to entrepreneurs as central actors in the process. One possible explanation for this apparent gap in literature is the difficult practical implementation of the entrepreneurial ecosystem approach, which in the case of cultural and creative entrepreneurship becomes even more problematic: diverging interpretations of entrepreneurship, entrepreneurial ecosystem and cultural and creative sector have triggered long debates over decades of research, making their measurability a complex issue. However, trial and error is an old and valuable approach to problem solving and researchers might as well not yield to overwhelming counter-arguments when undertaking this challenge, as the benefits seem promising and to outweigh the difficulties.

Some propositions throughout the chapter deserve especial attention in this study. One can argue that privatization of leadership has not been stressed enough, which transfers responsibility in the entrepreneurship process from policymakers (top-down) to entrepreneurs (bottom-up), while still acknowledging the important role of both stakeholder groups. Furthermore, quality of life is perceived here as an equally important influencing element of the ecosystem, comparable to finance or the rest, whereas some studies have implied a secondary role by integrating it in other elements, without a direct reference. Finally, there are two essential aspects which should be taken into consideration in the holistic understanding of entrepreneurial ecosystems: a) territorial embeddedness in a broader context, beyond the limits of the defined area of study, which usually works as the center (therefore *place-based*); and b) background conditions of evolution prior to the defined time frame, as emergence depends from the starting (anchoring) point.

## Chapter 3: Porto, an emerging cultural and creative city

*“If I was 20 years old now, I would not have moved to London because Porto would have given me what I desired”*

– João Vieira, singer of X-Wife, a music band from Porto from interview for BLITZ magazine in May 2018

It is no novelty that cities are commonly perceived as attractive centers for culture, creativity and entrepreneurship. Several scholars dedicated to studying the spatial contexts of the cultural and creative economy have argued that the urban and regional scale is of special interest and significance (e.g. Florida, 2003; Scott, 2006; 2010; Landry, 2012; Marques, 2017). Like industrial clusters, cities are important agglomerations of creative people and resources, with notorious network and evolutionary dynamics (Chapain & Propriis, 2009). Cities are also growing global phenomenon: Landry (2012) claims that over 50 percent of world’s population lived in cities by 2012, compared to 29 percent in 1980, and in Europe that figure already corresponded to 75 percent, reason why he calls the 21<sup>st</sup> century “the century of cities”.

Porto, the second largest Portuguese city on the northern Atlantic coast, with a population of around 250 000 people and 1.8 million in its metropolitan area, is currently emerging in the international context of cultural and creative cities. Having remained a fairly unpopular location roughly until the beginning of the 2000s, shadowed by the progress made in the capital city of Lisbon, around 300 kilometers to the south, it has seen an impressive (re)development in less than two decades. While by the end of the 1990s it was characterized by decaying buildings, high poverty and crime rates, it is now the stage of several international events, attracting growing foreign investment and it has become a trendy touristic destination<sup>3</sup>. This new influx of

---

<sup>3</sup> To cite a few examples: Primavera Sound, a music festival originally from Barcelona, has a spin-off version in Porto since 2012, with 80 000 visitors in 2017; Hostelworld opened a new office in Porto in 2017; the city has won several travel awards like “European Best Destination 2017”). According to an article on the website of InvestPorto, Hostelworld’s CTO John O’Donnel stated the following reasons for choosing Porto: transport and office infrastructure; availability of skilled workforce; easy accessibility from Dublin or London, where they have two of our offices; the tireless support of InvestPorto and the City Council.

people and capital is reshaping this once-culturally-homogeneous city, with well-preserved traditions, into a cosmopolitan place. The opinions among the local population are diverging between those who see this new development as a good opportunity for economic growth, internationalization, improve diversity and the city's infrastructures, and those who are struggling with a rampant inflation of local prices, due to increasing demand, and who fear the loss of its cultural heritage.

While this remarkable development was certainly the result of multiple factors combined, research suggests that a few events could have been particularly responsible for, directly or indirectly, changing the city's environment, namely: two mega-events, Porto European Capital of Culture (ECOC) in 2001 and UEFA European Championship 2004 (UEFA Euro 2004) in Portugal; the Portuguese economic recession (2009-2014); the action of the Creative Industries Agency in Portugal (ADDICT) since 2008, based in Porto; the municipal election and change in Porto's city council in 2013. Analyzing the impacts of these events already implies a territorial embeddedness of Porto's entrepreneurial ecosystem on different levels: the city of Porto (local), the North of Portugal (regional), Portugal (national) and Europe (international). Therefore, it is important to understand that the city's cultural and creative sector operates under influence of policy on many fronts.

The municipality has specific departments in charge of local culture, innovation and industry. Several initiatives were launched in the last few years, like Scaleup Porto (Appendix A) and Criatório, dedicated to support entrepreneurship in the sector. In Portugal, the promotion and stimulation of creative industries is a strategic objective, since they can be used to make countries and regions more competitive due their growth potential. In 2006, the national cultural and creative sector was worth 3.7 billion euros, representing 2.8 percent of the total wealth created in the country, surpassing the contribution of activities like food, textile and clothing industries (Sousa et al., 2016). The Portuguese Ministry of Culture and its subordinated National Arts Council (Direcção-Geral das Artes, abbreviated as DGARTES) are the main responsible entities for supporting these activities through attribution of public subsidies. Porto is part of the Northern Portugal region, together with cities like Guimarães (European Capital of Culture in 2012), Braga (UNESCO Media Arts City) and Aveiro. The region is administrated by the Northern Portugal Regional Coordination and Development

Commission (CCDRN), a public institution that works towards the integrated and sustainable development of the Northern Region of Portugal, contributing to the country's competitiveness and cohesion (CCDRN, 2018). This commission is responsible for the attribution of European structural funds for regional development, such as the program Norte 2020 (part of Portugal 2020 and Europe 2020) focusing on innovation (e.g. incubators, digital centers, fab-labs, co-workings (around 50 in the Northern Region by 2016) and R&D centers) (Le Gall, Fleming, 2016). The creative and cultural industries are also a common strategic priority of the European Union, with a specific program in action since 2014 called Creative Europe. A recent report on the role of public policy on innovation and cultural and creative entrepreneurship recommends European leaders to reinforce their current strategy for the coming European budget for 2020-2027 (Report of THE OMC, 2018) and a new agenda for culture has just been announced by the European Commission (2018) with several initiatives for the coming years to increase the support of the sector.

### 3.1. Porto European Capital of Culture 2001 and UEFA Euro 2004

Since Porto was European Capital of Culture in 2001, the city has changed considerably. With the program, Porto received an exceptional amount of European funding to improve the city's cultural offer and infrastructures. With a budget of over 100 million euro, one of the most ambitious since the initiative started in 1985 (Hitters, 2007) and probably inspired by the success of the World Exhibition in Lisbon in 1998, there were massive construction works in public space which left important landmarks: the construction of Casa da Música (a new futuristic concert hall signed by the Dutch architecture office OMA), the subway, as well as redevelopment of main sights in the city center like Avenida dos Aliados and the iconic riverfront. That year, an unusual amount of international artists was invited to showcase their work in the city, often at sold out events and with many visitors from outside Porto.

Later, Portugal hosted the UEFA European Championship in 2004. Although with a less explicit connection with the cultural sector, decisions for hosting sports mega-events, like the Olympic Games, have often underlying intentions of improving the location long-term attractiveness through urban redevelopment, improvement of infrastructures and place branding, which may lead to an increase of parallel and

subsequent entrepreneurial activities (Spilling, 1996, as cited in Cohen 2006). However, these mega-events can also have negative impacts on the location, such as increase of public debt due to excessive expenditure and inflation of local prices (Hall, 2006). 10 new and refurbished stadiums, at a total cost of 600 million euros to taxpayers (New Europe, 2004) and other facilities were built for the occasion across Portugal, including Porto. With the delay of several construction works scheduled for the ECoC in 2001, such as the one of Casa da Música, only finished in 2005, and the Portuguese economy slowing down, this could have been a driver for the economic recession a few years later (Hall, 2006), just like the infamous cases of the 2004 Olympic Games in Greece or the 2014 FIFA World Cup and 2016 Olympic Games (2016) in Brazil.

The intangible legacy of such events is often a topic of discussion. A study on the impact of the ECoC program in Rotterdam, also in 2001, having some projects in common with Porto, shows that the city's image as a cultural destination improved slightly, although the city's earlier characteristics continued to dominate (modern architecture, harbor, working city) (Richards & Wilson, 2004). Balsas (2004) argues that the city center's cultural life and livability seems to have improved, although recognizing this is a subjective opinion. Another study shows that, since 2001, foreign tourism in Porto increased significantly, but there was no improvement of the city's image, remaining poorly associated with events (Hitters, 2007).

### 3.2. ADDICT and the Northern Portugal Cluster of Creative Industries

The Creative Industries Agency Portugal (ADDICT) was founded in 2008 in Porto, following a study lead by Serralves (2008) co-authored by consultant firms Opium (Porto) and Tom Fleming (UK), which identified the Northern Portugal Cluster of Creative Industries and recommended the creation of an entity to represent it officially, recognized by the Ministry of Economy. It was founded by 10 partner institutions with a strong reputation in the region, namely three universities (Porto, Braga and Aveiro), Serralves' foundation itself, dedicated to the contemporary arts, Maus Hábitos (creative hub in the city center), Casa da Música (the new concert hall), among others.

Apart from the application process for the official recognition of the region as a creative cluster, the agency's scope of work was later extended to the whole country. It supported diverse initiatives, from the creation of management and entrepreneurship education programs dedicated to these industries, the competition for the creative industries' national award and a study on the Portuguese creative economy in 2016 (ADDICT, 2016). Several publications praise the success of ADDICT's activity (Guerra, 2013; Culture for Cities and Regions, 2015). A cluster of cultural and creative industries in Northern Portugal is said to emerge in 2008 with ADDICT's foundation, associating different elements (education institutions, companies, entrepreneurs, non-profit organizations, incubators) across the broad spectrum of activities from art to technology. The region is characterized by historically important avant-garde and underground movements, strong fashion, tourism and traditional industries, like crafts, and is perceived as a promising region for architecture, design and software (Guerra, 2013).

### 3.3. Portuguese economic recession

Following the global financial crisis, with the peak in 2008, Portugal was one of the most affected European countries. The national government in office at the time, led by prime minister José Sócrates, requested intervention of the International Monetary Fund (IMF) shortly before the end of their mandate, and the following 4-year government (2011-2015), a right-wing coalition between social democrats and conservatives, implemented radical austerity measures in public spending, such as public spending cuts (including merger of the Ministry of Culture) and privatization of public utilities. Unemployment rates, especially youth, were over 20 percent, causing a massive emigration of high-skilled labor, commonly referred to as "brain drain" (Isenberg, 2010; Eichenbaum et al., 2016).

How was Porto's cultural and creative entrepreneurial ecosystem affected by this devastating scenario? There is a discussion among researchers around the positive or negative impacts of crisis on entrepreneurship and the sector in specific. Earlier scholars propose the *push* and *pull* theories to explain this. The first describes when negative environmental factors (dissatisfaction with existing employment, loss of employment, etc.) activate latent entrepreneurial talent and stimulates ("pushes")

individuals into business activities. On the other hand, the existence of an attractive environment, such as an expanding economy, induces (“pulls”) alert individuals into new business formation (Valdez, 1988). In times of uncertainty, entrepreneurial leaders of cultural organizations, usually dependent on number of visitors, are often pressured to prioritize commercial over artistic goals, sometimes compromising the institution’s mission (Burton 2003). The cultural and creative industries might ironically do well during recession due to the positive role they play in economic activity (Pratt, 2009). However, a study shows that the great recession in the US around 2009 had a negative impact on entrepreneurship, against claims that recessions are a time of opportunity for entrepreneurs (Shane, 2011). Moreover, a rise in entrepreneurship might be an indicator of worsening work conditions and precarity, a common practice among self-employed cultural entrepreneurs who are often forced to start their own activity due to necessity and not opportunity (Oakley, 2014).

#### 3.4. Municipal elections and change of local government

In 2013, a new mayor and city council were elected. Before, the former mayor, Rui Rio, from the social democratic party, was in office for 12 years (3 mandates) between 2001 and 2013. He had an open and controversial opinion against public investment in cultural activities. Some of his infamous measures included the concession of Rivoli, a public theatre, to a private entity. With the new local government, there was a shift in public policy towards the support of cultural and creative activities and industries. The new mayor Rui Moreira and the former alderman for culture Paulo Cunha e Silva, victim of sudden death in 2015, are commonly perceived to have restored the sector’s trust, with several successful initiatives to support culture and entrepreneurship as an instrument of social cohesion, such as Criatório, Cultura em Expansão and Dias da Dança. After winning the election in 2017 again, they same city council will remain in office until 2021 (IETM, 2018) and it has announced several big projects for the cultural and creative sector in the city, namely the construction of several facilities in the area of Campanhã, including Plataforma Campanhã, Fonoteca Municipal and rehabilitation of the old Matadouro Municipal into a complex for the creative industries (“Rui Moreira, 2017). Coincidentally, it is roughly since 2013 that the city is assisting to



unprecedented internationalization and economic recovery, which is generally perceived as a desirable scenario.

However, possible negative consequences may equally arise. Inflation of local prices can be an obstacle for small entrepreneurs with low initial capital. Moreover, globalized cities have a tendency to perpetuate social inequalities<sup>4</sup>. Scott (2006) argues against Florida's theory that policymakers should focus on attracting what he calls the "creative class" to foster a creative environment, by saying that

Creativity is not something that can be simply imported into the city (...) but must be organically developed through the complex interweaving of relations of production, work, and social life in specific urban contexts (p.14).

As stated in a recent report, Porto's current policy challenge lies in developing a cultural offering catering for both the needs and interests of the local community (entrepreneurial activities and audiences), while diversifying and further developing the touristic offer through culture (Le Gall, Fleming, 2016).

### 3.5. Research expectations

Taking into consideration the developments analyzed until here, the following research expectations were formulated:

- A favorable context for entrepreneurship in Porto is thriving since 2008.
- The interdependence between Porto's entrepreneurs and elements of the entrepreneurial ecosystem is not a constant. Moreover, some elements are more static than others over time.
- Mega-events changed Porto's entrepreneurial environment on the long run.
- The creation of a specialized entity to promote the cultural and creative sector had a positive influence on the Northern region.
- Economic recession had a negative impact on entrepreneurship in Porto's cultural and creative sector.
- The change in Porto's local government was positive for cultural and creative entrepreneurship.
- The different levels of policy do not have the same degree of influence on Porto's entrepreneurial ecosystem.

---

<sup>4</sup> An example here is the recent development in San Francisco, USA. Formerly known as an attractive place for the artistic community, this has changed since the city became the global hot spot for the tech industry. The rampant inflation is forcing lower income classes to reallocate, as they cannot compete in the real-estate market against these industry workers.

## Chapter 4: Methodology

### 4.1. Research method and design

This section provides an explanation of the research method and design followed in the empirical part of this study, linking the theoretical framework and the results. The main purpose was to analyze the evolution of cultural and creative entrepreneurship in the context of Porto's entrepreneurial ecosystem essentially since 2008, with the research question guiding this study being: *how has Porto's cultural and creative entrepreneurial ecosystem evolved since 2008?* This question was divided in two research objectives:

1. To analyze the interactions between the main actors and factors of Porto's cultural and creative entrepreneurial ecosystem.
2. To describe and possibly explain its evolution, by triangulating secondary data with the individual experiences of selected key actors, namely entrepreneurs and experts.

A predominantly qualitative case study was chosen as method to address the research question, which defines Porto as the empirical setting. The same method has been used in popular entrepreneurial ecosystem studies focusing on a city or a region (e.g. Boulder: Neck et al., 2004; Phoenix: Mack & Mayer, 2016). It is appropriate to address research questions "about a contemporary set of events over which the investigator has little or no control" (Yin, 2017, p.9), such as evolution over a period. By answering "how" and "why", it categorizes as an explanatory type of case study. In the case of cultural and creative entrepreneurship within Porto's entrepreneurial ecosystem "the boundaries between phenomenon and context are not clearly evident" and there are "many more variables of interest than data points" (Yin, 2017, p.13).

The embedded case study design was chosen, as Porto's unique setting required a single-case study and "the subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case" (Yin, 2017, p.44). To avoid common pitfalls in single-case studies, the holistic aspects of the case were taken into consideration, like territorial embeddedness and background conditions.

Qualitative research is recommended for the analysis of a case in its natural setting, where the researcher is usually expected to spend some time on the field (Yin,

2017). Because this approach is empirically underdeveloped (Stam, 2015), qualitative research allows for inductive reasoning without formulating hypotheses. It is based on understanding the specific context in depth through the interpretation of the participants (Bryman, 2012), for which qualitative interviews were used. According to Creswell (2007), a “reflexivity of the researcher, a complex description and interpretation of the problem” (p.53) should be added, in order to extend on literature or signal a call for action. Both were considered in the discussion of results and implications for theory and practice.

Case studies should rely on multiple sources of evidence (Yin, 2017) and “are frequently sites for the employment of both quantitative and qualitative research” (Bryman, 2012, p.68). This was done by triangulating quantitative data from reports, and qualitative data from interviews to different stakeholders. Nevertheless, literature highlights several issues with quantitative research on entrepreneurial ecosystems. Complex systems cannot be effectively assessed using simple “count-based” metrics (Roundy et al., 2018). The common multivariate regression model does not seem adequate to measure the ‘system’ in a holistic manner and its quality for producing certain types of ventures (O’Connor et al., 2018). One study using the Global Entrepreneurship Index was inconclusive regarding the impact of entrepreneurial ecosystems on a country’s economic performance (Acs et al., 2017). “Cities mainly collect quantitative impacts” and there is the need to “collect more personal stories and experiences” (Culture for Cities and Regions, 2017, pp.19-20).

Qualitative research is therefore useful to study complex issues without specific identified variables (Bryman, 2012). It begins with assumptions and a possible use of a theoretical lens (Creswell, 2007). Likewise, “the case study inquiry benefits from the prior development of theoretical propositions to guide data collection and analysis” (Yin, 2017, p.13). The assumption based on the researcher’s observation is that a favorable context for cultural and creative entrepreneurship based in Porto is emerging especially since 2008. This development is then analyzed using the theoretical framework in chapter 2, while focusing on overcoming limitations from previous studies which were criticized for not considering three basic principles: the relationships between elements, uniqueness and evolutionary dynamics (Motoyama & Knowlton, 2017).

To confirm the appropriateness of the method used in this study, entrepreneurial ecosystem literature proposing an empirical methodology was briefly reviewed and compared. The used methods in the study of entrepreneurial ecosystems remain inconsistent (O'Connor et al., 2018). Scholars who have used a qualitative method in the study of entrepreneurial ecosystems are generally focused on analyzing a particular geographic region in depth, rather than trying to replicate the results, aware of their unique characteristics (Neck et al., 2004; Isenberg; 2010; Mack & Mayer, 2016). Unlike quantitative studies, the aim here is neither to compare different regions, nor to formulate generalizable hypotheses based on a limited number of cases (Stam, 2018). Instead, it is to identify common patterns in the narratives of the participants and try to establish relationships of cause and effect to describe a process. Despite the prevalence of one method, the study of entrepreneurial ecosystems should include both types of indicators and multiple sources of data, in order to produce meaningful and robust findings (ANDE, 2013; Sangler & Bell-Masterson, 2015; Roundy et al., 2018).

#### 4.2. Units of analysis

The object of this study is Porto's cultural and creative entrepreneurial ecosystem. As discussed so far, the study of entrepreneurial ecosystems required defining a territory, a time frame and possibly a focus on a particular industry sector or element(s) of the ecosystem. The territory was defined according to the geographic limits of the city of Porto, considering that these might differ from the limits of the ecosystem (Mason & Brown, 2014), embedded in the wider contexts of the Northern region, Portugal and Europe. In order to understand the evolution since 2008, it was necessary to include background conditions since 2001, often identified as a turning point for the city and the sector (Serralves, 2008). The focus was on the cultural and creative sector.

In order to operationalize the research objectives, which are related to its interactions and evolution, it was necessary to define the units of analysis among the population which better represents the entrepreneurial ecosystem. Entrepreneurial ecosystem literature suggests interviewing different stakeholders (Neck et al., 2004; Isenberg; 2010; Mack & Mayer, 2016). Therefore, two different groups of main actors within that ecosystem were considered: entrepreneurs, focusing on their

entrepreneurial activities and bottom-up processes, and experts, knowledgeable about top-down processes and with a more impartial perspective of the ecosystem as a whole.

To select the specific units of analysis among the population of entrepreneurs and experts, generic purposive sampling was used (N=13), as the choice of interview subjects followed rigorous selection criteria defined a priori (Bryman, 2012). In the case of entrepreneurs, the first criterion was to be the founder of an existing and registered activity since 2001 in the cultural and creative sector, based in the city of Porto. As for the experts, it was important to choose someone who occupied a leadership position in Porto during the time frame 2008-2018, who was knowledgeable about the different elements of Porto's entrepreneurial ecosystem, with a career in the cultural and creative sector, preferably with experience as a researcher, being able to provide an answer if asked about technical details, such as the effectiveness of a certain policy, the accuracy of data in reports and specificities of the sector. Therefore, former executive directors of ADDICT were chosen as key informants.

There was also an effort to select a sample as diverse as possible (maximum variation sampling). Firstly, in terms of age and gender, since there could be differences associated with the two variables. Secondly, because the cultural and creative sector comprises a broad spectrum of activities, it was important to cover the widest range possible. Moreover, the focus was on the evolution since 2008. Since it was not possible to perform a longitudinal study, it was necessary to select entrepreneurs who not only started their activity at different points in that time frame, but also who did so before 2008, in order to understand the background conditions for that evolution, for instance the role of Porto European Capital of Culture 2001. Diversity was also considered when choosing the experts, by inviting two former executive directors of ADDICT during different periods, covering the years 2010 to 2016. Both were considered to have distinct careers in the sector apart from ADDICT and were experienced in dealing with different policy levels (local, regional, national and international).

### 4.3. Data collection

This section explains the different steps taken during the data collection process (how and what data was collected) to meet the research objectives of this study. Primary data was collected by the means of qualitative interviews and at an additional conference organized by Porto City Council which took place during the data collection period, to debate national art subsidy cuts with cultural workers (Appendix E).

Semi-structured interviews are a useful method in qualitative research, as they allow for an efficient comparison of answers, while providing the researcher with enough flexibility to develop on valuable unexpected insights (Bryman, 2012). A total of 11 semi-structured, face-to-face interviews with open-ended questions were conducted: nine interviews to cultural and creative entrepreneurs (as defined in Chapter 2.6.2. and categorized according to the second table in Appendix B) and two interviews to experts on Porto's cultural and creative sector. An overview of the interview subjects is provided in Appendix B. After shortlisting possible candidates, each of them was screened based on their online presence (website, social media channels, press articles) to assess their curriculum and reputation. Once the final selection was made, they were contacted via e-mail, Facebook or LinkedIn with an invitation to participate and brief explanation of the research subject, which was later explained in detail before starting the interview. Upon an affirmative response, interviews were scheduled according to their availability.

In two cases, two entrepreneurs were interviewed at the same time since they were co-founders of the same entrepreneurial activity. Their views were considered separately, as they had different professional backgrounds and expertise. Three other entrepreneurs and one expert have initially agreed to participate, but due to time constraints on the part of the participants it was eventually not possible to arrange an interview.

The interviews were recorded with the participants' consent, the majority conducted at their work place, between 28<sup>th</sup> of March and 5<sup>th</sup> of April 2018 in Porto. The total recorded time is approximately 10 hours and 20 minutes, an average of 56 minutes per interview (the shortest interview is 24 minutes long and the longest is one hour and 28 minutes long). Two distinct interview guides for entrepreneurs and experts were prepared. The interviews were conducted in Portuguese for practical

reasons, except for one as requested by the interview subject. These were later transcribed verbatim and the important parts were translated into English for citation purposes. It is important to add that in one interview, the entrepreneur requested the manager of the entrepreneurial activity to be present. Her brief interventions were equally transcribed but not considered for the analysis of the results, as this was not planned and the person did not qualify as any of the pre-defined units of analysis. Below is a map with the locations of the interviewed entrepreneurs by entrepreneurial activity (Figure 8). The entrepreneurial activities were organized chronologically by starting date next to the selected events described in Chapter 3 to visualize their experience (Figure 9).

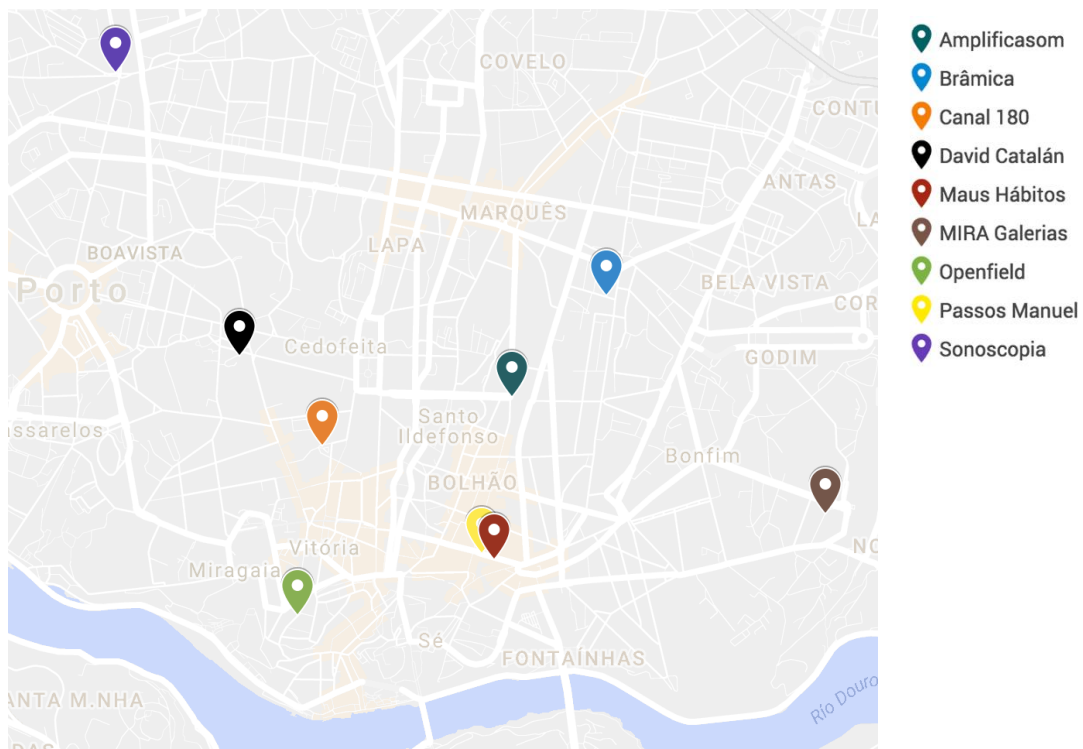


Figure 8: Entrepreneurial activities location in Porto (own elaboration using Google Maps)

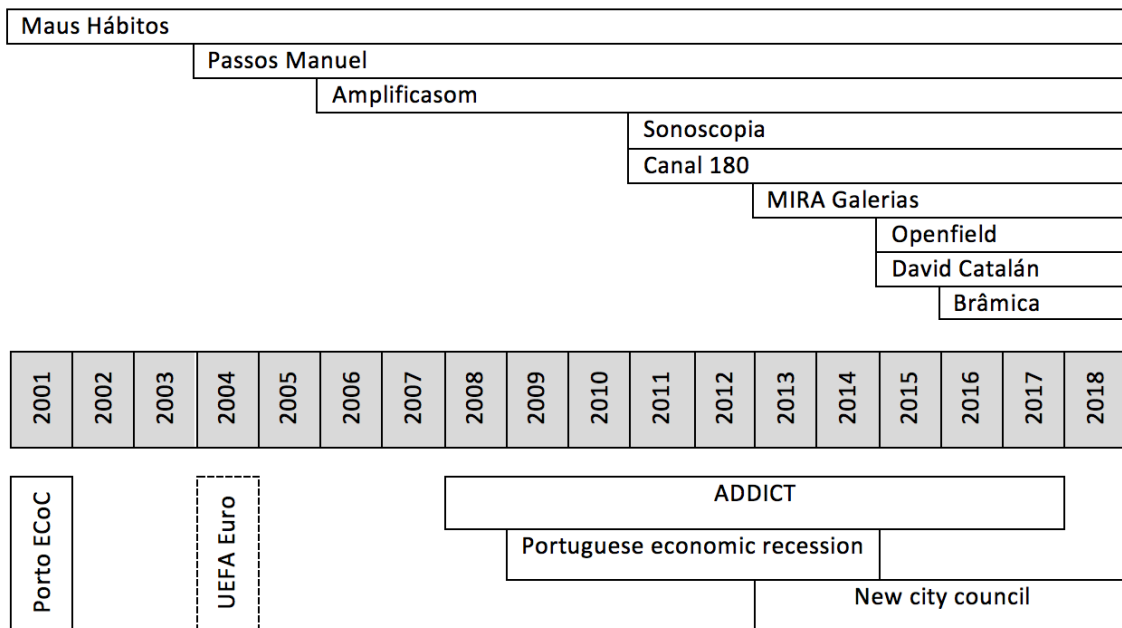


Figure 9: Timeline of interviewee's entrepreneurial activities and analyzed events in Porto (own elaboration)

Before writing the interview guides (Appendix C), a list of sub questions derived from the research question was prepared and used as orientation for the interview questions. The sub questions are listed below:

- How interdependent have entrepreneurs and elements of the entrepreneurial environment been?
- How have entrepreneurs performed individually and collectively?
- What was the role of the different policy levels (local, regional, national and European) in the evolution? Was it a more top-down or bottom-up process?
- Did some major events since 2001 cause significant changes in Porto's entrepreneurial ecosystem? To what extent?
- What interactions are observed between Porto and the territories in which it is embedded?
- Is this a sustainable ecosystem?
- Do entrepreneurs and experts' perceptions converge or diverge?

The interviews were divided in different sections, according to the content of the questions, and led essentially in the presented order. Because they were semi-structured, probing questions were asked to clarify critical information for the purpose of the study. Furthermore, to avoid possible researcher bias, questions were first asked in general terms without specifying, as the interview guide shows. Then, answers were tested by asking a similar question but referring to the intended subject



of analysis, to check if the answers differed. For instance, by first asking “could you think of any public figure who was important for your activity as an entrepreneur?” and only then “how did the election of X influence your activity?”. It is important to note that researcher own observations were used only as a point of departure.

Finally, secondary qualitative and quantitative data was collected from official reports and statistics (desk research) related to the creative economy and the different territories where Porto’s entrepreneurial ecosystem is embedded: Porto and the Northern Region (Serralves, 2008; Culture for Cities and Regions, 2015; 2017; Le Gall, Fleming, 2016; Scaleup Porto, 2017), Portugal (ADDICT, 2016; Bramão, 2016; Statistics Portugal, 2018) and Europe (Report of THE OMC, 2018).

#### 4.4. Data analysis

This section provides an explanation on how collected data was analyzed. The data collected during the interviews was analyzed using thematic analysis, following the recommendations of Braun and Clarke (2006) and Bryman (2012), considered popular methodological literature according to the high number of citations. This is a common method in qualitative research, where the aim is to find common patterns across a data set.

The first step was to get acquainted with the data by reading it multiple times, which allowed the recognition of patterns, and also during the process of transcription, which despite the considerable work load was very useful to highlight important passages. After this, initial codes were generated related to the concepts in the theoretical framework, namely the elements and evolutionary dynamics of the ecosystem. The fact that the interviews were divided by sections was useful to facilitate this step. The next step was an iterative process of grouping the codes by themes and defining new codes for topics which emerged during the analysis process and that were not initially planned. A table with the used code definitions by theme is provided in Appendix D. Another useful strategy was to use query search in the transcription Word files based on key words annotated during the transcription process to locate important passages. To conclude, a constructive narrative presenting

the most relevant findings was developed according to the established themes, some of which were merged when the findings were highly interrelated.

To ensure the quality of the findings, experts were confronted with the data in reports and asked about other useful sources of information. The triangulation technique was then two-fold, contrasting the answers of entrepreneurs to those of experts, regarding the same aspects but from different viewpoints, and primary data, mostly qualitative, with quantitative data in the selected reports.

## Chapter 5: Results

This section presents the analysis of results of this study. The interviewed subjects have ages comprised between 29 and 68 and the gender distribution is 69 percent male and 31 percent female. Nine interviews to eleven entrepreneurs who founded or co-founded nine different entrepreneurial activities in the cultural and creative sector were conducted. Seven of these activities are in the for-profit sector and two out of nine are exclusively non-profit. More than half of the activities have a strong music affinity, although not exclusively, and the majority combines different types of activity. Furthermore, two experts on the local cultural and creative sector were interviewed: Cristina, former executive director of ADDICT in the period of 2010-2014, member of the ECoC committee and several European networks, independent policymaker and researcher; and Joana, executive director of ADDICT in the period of 2015-2016, currently Chief Talent Officer at Porto's city council and former vice-director of the National Arts Council (DGARTES). A complete overview of the participants, as well as a table with the categorization of the cultural and creative sector, is available in Appendix B.

### 5.1. Profile of entrepreneurs and entrepreneurial activities

André (35, male) is the co-founder and director of Amplificasom, a promoter of several music events in Porto. Teresa (50, female) is the founder of Brâmica, a crafts workshop dedicated to ceramics, which works both as a shop and a co-working space where she is the mentor. David (29, male) is an independent fashion designer from Spain based in Porto who co-founded a clothing brand named after himself, David Catalán. Part of the operations are also in Madrid, where the other co-founder lives. Luís (30, male), executive producer at Canal 180, a television and online channel dedicated to arts and culture audiovisual content, spoke on behalf of the founder, João (40, male). Luís has also co-founded two activities in Porto: OPO'Lab, a fab-lab dedicated to design industries and events, and Get Set Festival, a showcase and meetup event for creative workers. Daniel (47, male) is the founder of Maus Hábitos, a creative hub combining café, bar, restaurant, art gallery and co-working space for cultural and creative industries. He is also the co-founder of Saco Azul, a non-profit arts organization based

at Maus Hábitos, responsible for diverse cultural initiatives. Manuela (68, female) and João (68, male) are the founders of MIRA Galerias (Espaço MIRA, MIRA Forum and MIRA Artes Performativas), a complex of galleries essentially dedicated to photography, contemporary and performing arts. Rodrigo (35, male, media artist) and Nuno (40, male, architect) are co-founders of Openfield Creative Lab, an organization of five creative workers from different areas dedicated to projects intersecting art and technology, such as interactive media installations. Alexandre ‘Becas’ Xavier (67, male) is the founder of Passos Manuel, an old cinema converted into a nightclub, cinema and concert venue. Gustavo (42, male) is the co-founder of non-profit organization Sonoscopia, dedicated to sound engineering and experimental electronic music, also organizing workshops and events. The figure below is an overview of the performance of their entrepreneurial activities in terms of average growth (size), based on initial and current values, and survival (years).

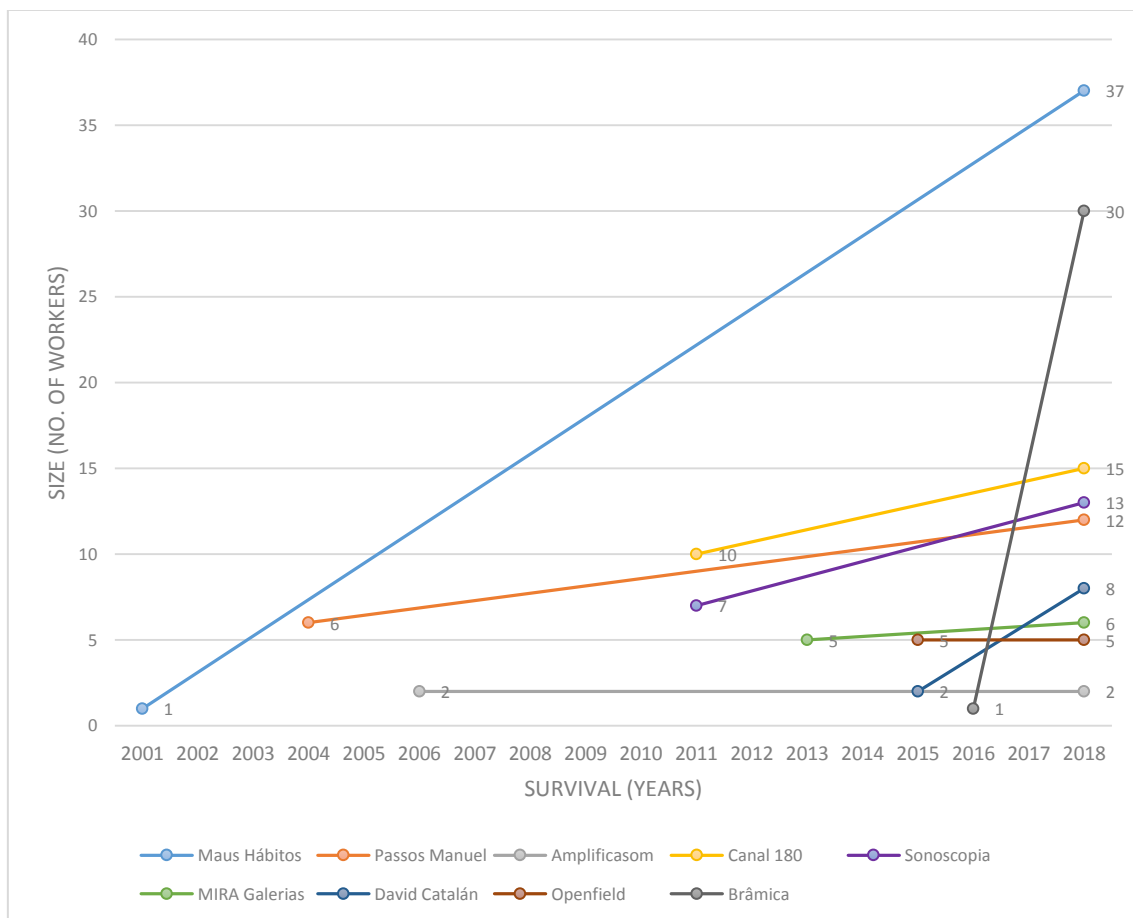


Figure 10: Entrepreneurial activities' performance: average growth (size) and survival (own elaboration)

## 5.2. Interaction between entrepreneurs and the environment

### 5.2.1. A livable place seeking diversification

This study departed from a definition of entrepreneurial ecosystem which considers a territorial boundedness (Stam & Spigel, 2018). Some researchers argue that the physical location is losing importance to the digital location with technological advancements (Sussan & Acs, 2017). Physical location combines three elements of the entrepreneurial environment (see Chapter 2.2.): “physical infrastructure”, “territory” and “quality of life”. Therefore, the interview subjects were asked different questions with the intention of assessing the satisfaction of entrepreneurs with location, influence of the geographic position and quality of life on entrepreneurs’ decision to start their activity, dependence of the activity on the specific physical location and on a physical location in general. Because the answers often referred aspects of local culture and demand, as they are hardly separable, the results for the three elements were intentionally grouped.

Regarding the degree of satisfaction with the location, the interviewees were asked to mention advantages and disadvantages. Most interviewees mentioned the size of the city as both an advantage and a disadvantage: “the advantages are the same as the disadvantages (‘Becas’, interview)”. While short distances are convenient and the city’s environment is perceived as having a relaxed and relatively affordable quality of life, due to its medium scale when compared to bigger cities, on the other hand it is difficult for activities targeting niche audiences because of the lack of diversity of demand:

Being in Porto is good, because it is a small city, but at the same time it is also complicated because it is a small city and with few people. (...) Maybe if I was in Lisbon, I would have been more successful from the beginning (‘Becas’, entrepreneur).

Porto is still a relatively cheap city compared to other European cities, but it allows you to move (...) around Europe, or the world. I think Porto is a quite appealing city to live in (Gustavo, entrepreneur).

Some interviewees had a more negative opinion about Porto’s relative peripheral position in the European context:

The geography is terrible, because we have a hard accessibility, we are here in a corner (Cristina, expert).

We are here in the “ass” [verge] of Europe (André, entrepreneur).

The weather was mentioned as another drawback compared to other regions in the country, especially for outdoor activities. Nonetheless, festivals are still a common form of cultural entrepreneurship in the Northern Cluster (Figure 11):

Many of our projects were outdoors and there is always bad weather here in Porto, it rains a lot (Rodrigo, entrepreneur).

What is attractive about Portugal is the climate, even though Porto is deplorable in terms of climate (Cristina, expert).



Figure 11: Geographic distribution of Portuguese registered festivals with a music focus in 2016  
N=249, 18% increase from previous year (Bramão, 2016). Red rectangle = Northern Cluster

All interview subjects said with conviction that the physical location remains of great importance, despite the help of technology in shortening distances, thus far from being a digital ecosystem (Sussan & Acs, 2017). When asked if they could imagine themselves doing the same activity being based somewhere else, most interviewees responded affirmatively, which shows a low dependence on the specific location for their entrepreneurial activity. Regarding the dependence of local infrastructures, the airport, the subway and performance venues were the most commonly referred as essential for their activities:

It is incredible to pick up a band from the airport and in 20 minutes you are here (...) Porto is extremely interesting o Porto, you can organize a good concert at Maus Hábitos or Hard Club (...). Since we have Hard Club, a lot changed (...). For me, Passos Manuel has the best acoustic of the city (André, entrepreneur).

To have Maus Hábitos across the street is good. (...) the subway was something very important for the city ('Becas', entrepreneur).

We are here 25 minutes away from the airport. I walk 100 meters, enter the subway and get off inside the airport (Daniel, entrepreneur).

Highly related to the physical location, the influence of local culture on the performance of entrepreneurial activities was the next aspect to be analyzed. Here, the interviewees were asked about the acceptance by the informal network (family, friends, acquaintances) and the local community. The informal network was sometimes skeptical about the proposed activities in the conceptualization phase, while the reception by the local community was often very positive.

Our intention from the beginning was to create a good relationship with the local community. (...) We immediately liked the reception by the community of our neighbors (...) many [of our friends] thought we would not last long... they were gossiping, predicting bad forecasts, a very big skepticism (Manuela, entrepreneur).

An issue which concerns both culture and demand is mentality. Some entrepreneurs criticized the local community for sometimes being close-minded, which had a negative result on their performance when experimenting with new formats:

It's a small city with few people... I would not like to say avant-garde, but more open to new things ('Becas', entrepreneur).

In that sense, most entrepreneurs see the internationalization of the city as an opportunity to diversify local demand, challenge established conventions and as a source of motivation:

We have high-quality foreign visitors. It improved a lot. It is much more fun to live in Porto... [in 2012] there was not this "fresh air", these different views, people who were congratulating you for your project which is original in any part of the world. When you do not have those views, it is inglorious (Daniel, entrepreneur).

I think everything that is happening to the city has been quite positive (...), bringing new people... ('Becas', entrepreneur).

Porto is becoming – it was already dazzling, but with all this diversity... - great, to meet different people (...), with different experiences, also allows me to grow (Teresa, entrepreneur)

### 5.2.2. Education as source of talent and demand

Education, talent and demand are fundamental elements of the entrepreneurial ecosystem (Stam, 2015). To analyze the degree of interdependence between

entrepreneurial activities and these local factors, questions regarding the education background of entrepreneurs and their co-workers, the profile of their consumers and to what extent these institutions were important for their activity were asked. According to the answers of interviewees, the three aspects are closely interrelated in the case of Porto.

The first evidence of the close relationship is that all interviewed entrepreneurs without exception, including David who is from Spain, studied in Porto. This also applied to the great majority of their workers (N=153) except Brâmica, where they are mostly foreigners. When asked about the relationship with universities and schools, at least two entrepreneurs mentioned strategic collaborations with institutions regarding internships. Another said it was at university in Porto that he met his current partners in the organization. Moreover, local education institutions are not only important sources of talent for the analyzed entrepreneurial activities, but also of demand: 'Becas' and Daniel affirmed that being close to the Fine Arts faculty is essential to their activity, as students are their most important clients. In return, they help launching emerging talents, who use their venues as platforms to showcase their work, and offer their support - 'Becas' added many students have asked him for endorsement letters when participating in competitions. Lastly, universities seem also to play an important role in diversification of demand and local culture by attracting foreign exchange students:

Foreigner students here in the city, ERASMUS, the University of Porto (...) brought new people, who created new movements that remained (Teresa, entrepreneur).

### 5.2.3. Informal collaboration overrules institutional support

In chapter 1.3. it was stated that researchers should acknowledge valuable contributes to the understanding of entrepreneurial ecosystems from related concepts (Stam & Spigel, 2018). Collaboration and competition are central dynamics to the study of industrial clusters, which also deserve attention in the case of an industry-specific entrepreneurial ecosystem. It relates especially to the elements "networks" and "intermediaries/support services". Questions were asked about their formal and informal partnerships or memberships, views on co-working spaces and incubators, the role of support services such as ADDICT, consulting firms and information centers



for entrepreneurs, and also the territorial embeddedness of Porto's ecosystem within the Northern Portugal Cluster of Creative Industries.

Entrepreneurs and experts are assertive that collaboration and co-creation are key factors for their survival. Collaboration is regarded as particularly strong and an important asset of Porto's environment when compared to bigger cities like Lisbon, where competition is said to be much more prominent. The local community was often described metaphorically as a family in order to emphasize the strong spirit of mutual help among creative workers.

[One advantage is] our capacity of mutual help... when there were budget cuts in the arts, Lisbon complained much more than Porto, because in Porto (...) if you have a problem and need a beamer, I will borrow you. In Lisbon that does not happen. (...) I realized there are people coming from Lisbon saying that they feel a community here (Joana, expert).

Of course [we collaborate with local organizations]. It is a stark difference compared to Lisbon (...) You get along well with everyone, in a healthy way... when you discover you want the same band (...) you unite and make it happen. I find it extremely beautiful (...) in a city like Lisbon it is completely different. There, people try to bid more (André, entrepreneur).

[Our European report] presents different (...) inspiring examples (...). We have the cases of PINC and the participatory budget, because there is a promotion and facilitation of user-driven, co-creation logics (...) Among the priorities are culture and creativity (Cristina, expert).

This is in line with the theory that resource scarcity leads to cooperation, not competition (Sonenshein et al., 2017). Most entrepreneurs added that competition is irrelevant in their case, in some cases justified by the ease of being unique in Porto.

There is no competition. There are common points (André, entrepreneur).

Porto (...) still allows you to do something for the first time (Luis, entrepreneur).

In Lisbon I know many competitors, but in Porto I do not know many (Rodrigo, entrepreneur)

I believe (...) there are no competitors (...) I do not perceive a direct competition, or at least I do not think about it (Nuno, entrepreneur)

We cannot talk about competition... Casa da Música [1 km away] has an entity called Digitópia related to electronic music (...) if we plan a workshop, we try not to collide, to not compete for the audience (...) we try not to interfere (Gustavo, entrepreneur).

However, there was some skepticism about institutional forms of collaboration and support. One given example was regarding incubators that operate as mere real-estate agencies, without mediators who promote exchanges between tenants. Another

example is regarding the short life of ADDICT since its foundation in 2008. It was revealed during the interviews that ADDICT was dissolved in 2017 due to lack of funding from memberships. Both former executive directors blamed the size, number and hierarchy of founding institutions for lengthy decision processes, which resulted in the inability to respond quickly when necessary, according to them a reason why the Northern Cluster never managed to receive an official recognition. Institutions and top-down initiatives, lacking practical insights, can have an inaccurate perception of the reality. Daniel claims this was the case of ADDICT, as among the board members, he was the only to actually have the experience of owning a business. The minority of entrepreneurs who had heard about ADDICT was not aware of its achievements. Luis agrees with Scott (2006) that creativity should emerge organically:

There is, or was, ADDICT (...) *supporting the ecosystem*, but (...) Porto is not a city ruled by laws, everything that becomes institutionalized is not going to work (...) when there was no money, things were also working (Luis, entrepreneur).

As previously noted by Cristina, the creative industries incubator of the University of Porto (PINC) deserves recognition as a successful institutional initiative, confirmed by one of its tenants who had been skeptical about institutionalization. Other models of coworking were also referred as beneficial:

Being in an incubator that is part of the university is important for us (...) we are very free (Luis, entrepreneur).

I think UPTEC [mother organization of PINC] has potential (...). If I had to map the entrepreneurial ecosystem, I would start by co-works like UPTEC... (Joana, expert).

I find [incubators] extremely positive... our office is in a co-work, you have your own space but then there is a cluster... another promoter, a lawyer, an architect, a musician.... It creates different synergies (André, entrepreneur).

We considered moving to District [a co-work] (...) and PINC as well... there are people from different areas and interesting dynamics. We could benefit from being in such an environment (Rodrigo, entrepreneur).

Interestingly, some entrepreneurial activities work as informal incubators and co-works themselves, as they are used as collective working spaces by independent workers. Maus Hábitos rents office spaces to creative organizations and often uses their services (e.g. their website by guest organization Bondlayer); Brâmica has a subscription for craftsmen who wish to use her workshop, providing her expertise; in Openfield, each founder is from a different area and has parallel independent projects;

Sonoscopia shares its space with professionals who are not part of the association, but who wish to use their amenities, like the sound studio.

Finally, important dynamics of Porto's territorial embeddedness in a broader network - the Northern Cluster - are observed. The director of Guimarães European Capital of Culture 2012 was Carlos Martins, founder of Opium, a consultancy firm for cultural and creative industries in Porto, co-author of the report by Serralves (2008) which identified the cluster. He was attributed the responsibility for the creation of ADDICT. Three entrepreneurs and both experts mentioned Carlos Martins as a key actor in the ecosystem.

We [OPO'Lab] were commissioned to do Guimarães 2012... ADDICT, Carlos Martins supported a lot... Guimarães 2012 was really important because (...) a lot of people from Porto got a "big balloon of air" to breathe, because people were really struggling [with crisis] (Luis, entrepreneur).

Opium is a company that was created by Carlos Martins (...) it has grown substantially, and it was pioneer in considering the cultural and creative sector, not only the cultural one (Cristina, expert).

While at ADDICT, Joana helped Braga in the application process for the title of *UNESCO Creative City of Media Arts*. The PhD program in Digital Media attended by Gustavo and Rodrigo is a partnership between Porto and Aveiro universities. Apart from these, other places within an 80 kilometer radius from Porto were mentioned. This concentration is pointed as the reason why ADDICT extended its initially regional influence to the whole country:

Industrial production of the sector is mostly up here, in Lisbon you have [services]... a study claims 80 percent of the world production of luxury goods, be it jewelry, furniture, clothing, comes from an 80 to 100 kilometer radius from Milan and Porto. If you realize, we have the textiles from Guimarães, cutlery (...) Chanel, Bulgari are producing parts here. Clothing the same, shoes also... (Joana, expert).

Our brand is here because it is much easier to produce here (...), to have the brand in Portugal [than in Spain] (David, entrepreneur).

Big actors in this process [are] University of Porto, University of Aveiro, University of Minho [in Braga]. They were ADDICT's partners (Cristina, expert).

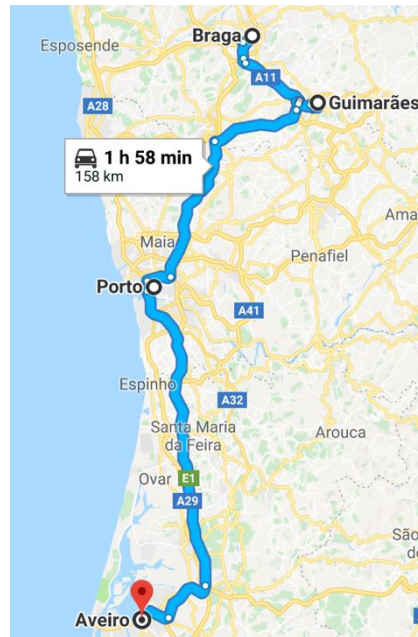


Figure 12: Distance between identified nodes of the Northern Cluster (own elaboration using Google Maps)

#### 5.2.4. Public leaders are feeders

Leadership is identified across entrepreneurial ecosystem literature as determinant for its evolution (Isenberg, 2011; Stam, 2015, Mack & Mayer, 2016). While some authors considered policy as a separate sphere from private leadership, Stam (2015) merges them intentionally. He describes a process of privatization of leadership, from public to private leaders, where private leaders *drive the* entrepreneurial process (bottom-up), and public authorities *feed* the process (top-down). Analyzing these processes in the case of Porto, the elements “leadership”, “finance”, and “formal institutions” seem highly interrelated. Interviewees were asked about the dependence of their activity on public and private funding, the influence of formal institutions (laws and bureaucracy), merit recognition, awards from competitions and to reflect on their financial performance since they started. In terms of finance, the results regarding their business model and sustainability based on their answers are described in Table 3 below.

*Table 3: Business model and financial sustainability of entrepreneurial activities*

<b>Name</b>	<b>Business model (revenue source in %)</b>	<b>Financially self-sustainable (break-even)?</b>	<b>Income sufficient for founders to live of this activity?</b>
Maus Hábitos	45% restaurant, 40% bar, 10% commissions, 5% subsidies (Saco Azul)	Yes	Yes
Brâmica	100% sales: biggest share: workshops, smaller share: co-work places, own crafts	Yes	Yes
Canal 180	95% sales, 5% European funds	Yes	Yes
Sonoscopia	60% sales, 40% public subsidies	Yes	Yes
Passos Manuel	100% sales: mostly bar, entry fee (symbolic, does not cover costs)	Yes	Yes
David Catalán	60% sales, 20% custom orders, 20% competition prizes	Yes	No
MIRA Galerias	100% private investment	No	No
Openfield	100% sales	Not always	No
Amplificasom	100% ticket sales	Yes	No

The first conclusion is that, except for Sonoscopia, the only registered as a non-profit organization, public funding played little or no role in analyzed entrepreneurial activities. However, most of these organizations are eligible for subsidies or innovation incentives on different policy levels, but often did not manage to receive any support. For example, when asked about initiatives like Portugal 2020, the majority replied that they had heard about it but considered it was not worth the effort of trying. The application procedure is described as too complex and usually requiring services from consulting firms, like Opium, which are expensive and do not guarantee their success.

On the local level, there was barely any support from the municipality for 12 years (discussed in detail in 5.3.3.), especially for the cultural sector. This could partly explain why 90 percent of the mapped cultural and creative activities in Porto's city center were from the private sector (Serralves, 2008, Appendix A). Since public support was never possible, André chooses to have a side job over strategies which compromise artistic quality:

I have a transport company and I balance my life like this, working on both at the same time (...) [otherwise] I would have to book the most commercial bands (...) [Support] was unthinkable in Rui Rio's time as mayor. I met with him and the alderman for culture and I was completely ignored, like "who is this kid and what is he doing?" Amplificasom already existed and was relevant (André, Amplificasom).

The question if these entrepreneurs have a portfolio by opportunity or necessity arises. David said he needs to accept custom orders to help sustaining the creative side of his work. Teresa said workshops are her biggest source of revenue, although they occupy the smallest share of her time. Daniel decided to found a separate non-profit organization (Saco Azul) based at Maus Hábitos, mainly with common members, to be responsible for cultural activities and which allows him to apply for more subsidies. In four cases, entrepreneurs need side jobs, or personal savings in the case of MIRA, to make a living.

Another indicator of privatization of leadership is that two activities emerged from competitions lead by private institutions. The founder of Canal 180 won the National Creative Industries Award in 2010, an initiative of Serralves Foundation (dedicated to contemporary art) and Super Bock (beer brand). David Catalán had a similar story:

I started earning money at competitions and I decided to invest it in something personal (David, entrepreneur).

Although he recognizes it is easier and cheaper to produce in the region of Porto, compared to his home country Spain (proximity to suppliers, Valdez, 1988), he notes that life as a small fashion designer is difficult and he suggests that taxes can be extremely high for foreign young entrepreneurs:

Working as a porter is something that helps me earning money, but it is also necessary (...) [the legal system] is slow and harms [my activity]. Once I received 4000 euro from a competition and the Portuguese state kept 2000, while if I was Portuguese it would not have taken more than 500 (David, entrepreneur).

Other critiques to the legal system were the lack of transparency in the requirements for new creative organizations, the fact that the same rules apply for big and small organizations, with different financial capacity, and radical rules imposed on nightlife establishments in residential streets without a transition period. All of these are said to have a negative impact on financial performance. Recognizing improvements, the role of the new local government remains as feeder:

The new city council did not *do*, but it let things happen (Teresa, entrepreneur).

[They should] decentralize, give means for organizations in Porto to make things by their own head (Becas).

### 5.3. Evolutionary dynamics of Porto's ecosystem

Earlier studies have been criticized for studying entrepreneurial ecosystems as static (Mason & Brown, 2014). Mack & Mayer were among the first to describe their evolutionary dynamics, followed by other important contributors (Spigel & Harrison, 2018). According to their framework (excerpt in Chapter 1.5, Figure 4), Porto's entrepreneurial ecosystem is currently in the growth phase since policymakers have realized the need to foster an entrepreneurial ecosystem and are moving from traditional developments such as "clusters" (Mack & Mayer, 2016). Evidence of this is the initiative Scaleup Porto, responsible for mapping the ecosystem, among other activities dedicated to entrepreneurship (Annex A), and the frequent use of the term ecosystem by Porto's mayor during a conference (Annex E, notes). The challenge lies then in identifying the context of its emergence. Moreover, a series of events are believed to have changed the environment, testing the ecosystem's resilience and sustainability.

#### 5.3.1. Emergence: aftermath of mega-events

The first mega-event to be analyzed was Porto European Capital of Culture 2001. A study conducted by Serralves (2008) identifies the European Capital of Culture program as a turning point for Porto's cultural and creative sector (Figure 9), with a significant increase of activities compared to the previous years (left) and steadily growing after 2001 (right).

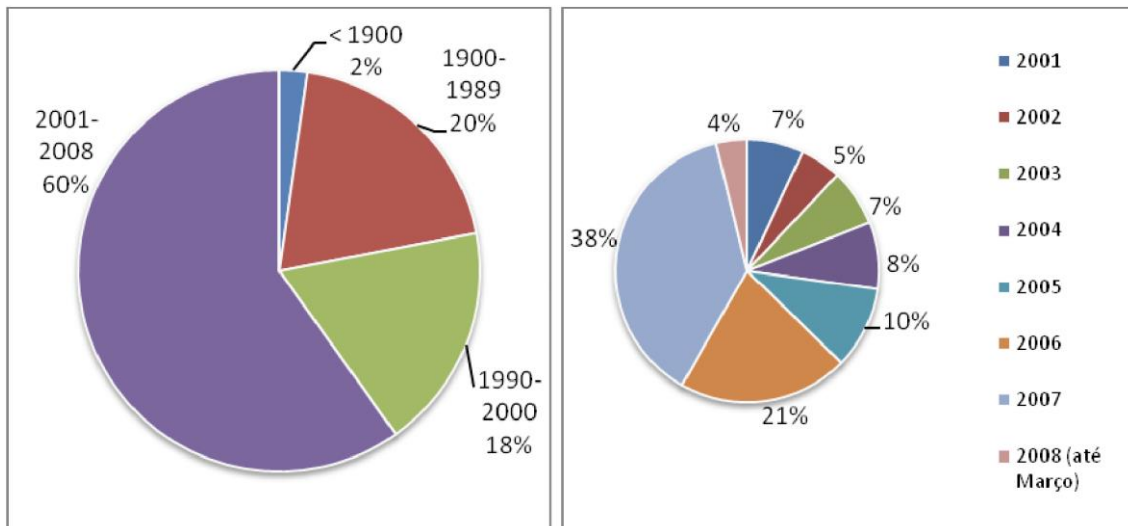


Figure 13: Cultural and creative activities in Porto's city center by year of opening (Serralves, 2008) (note: data from 2008 only available until March)

Participants were asked about the perceived influence of the program on the recent development of the ecosystem. The opinions were divisive, mostly because the successive years, sensibly until 2006, are described as a “dead” period in terms of cultural offer, attributed to the lack of interest by the local government in office lead by Rui Rio, who remained until 2013.

I am not sure about [the legacy of ECoC 2001] actually. Many people talk about it, and that it was vital. I am not so sure, because after there was a huge gap (Gustavo, entrepreneur).

The problem with 2001 is that it did not have an impact in the city, or we did not feel it, because it was followed by a period, people tend to forget, but it was an incredible rewind (João, entrepreneur).

The graph above confirms this fact (right), as a sudden increase of 11 percent (from 10 to 21 percent) between the years of 2005 and 2006 can be observed, followed by an increase of 17 percent in 2007. Based on this data, and since emergence depends on the anchoring point (O'Connor et al., 2018), it is possible to say that the ecosystem was slowly emerging from 2001 to 2006, with low firm birth rates, and that from 2006 it entered the current growth phase (Mack & Mayer, 2016).

Despite the controversy, most of the physical infrastructures entrepreneurs mentioned earlier as important for their activity, like Casa da Música and the subway, were part of the urban redevelopment plan funded with the program, generally seen as an important legacy. As Balsas suggested (2004), the center became slightly more lively but especially later:



I think Porto 2001 was a very important milestone in the city, for the rehabilitation of many streets in the city, it is not a coincidence that they are now the liveliest... I think it was a turning point... for the city, people's attitude, institutions... It showed it was possible to fill venues with *hard* performances ('Becas', entrepreneur).

What made me write to a first band to schedule the first concert was the fact that there was nothing happening in Porto [before 2006] (André, entrepreneur).

Diverging from conclusions in literature (Richards & Wilson, 2004; Hitters, 2007), the city image saw an improvement as well:

I believe it was a good starting point for people to see the impact of culture and creativity in the society. The city itself was very grey... even in terms of marketing, there was a change... the city branding started very much with that (Joana, expert).

However, negative consequences of that urban redevelopment were also mentioned, namely delays in construction works the river front, formerly the location of many cultural organizations, with apparent second intentions of converting this into the touristic sight of today, which forced many entrepreneurs like Daniel and 'Becas' to reallocate to other parts of the city at the time.

Because of its less obvious connection to the cultural sector, no direct question regarding UEFA Euro 2004 was asked, but rather if any other event could have influenced the current development. Only one entrepreneur mentioned the event as "an extension of Capital of Culture", where an exceptional period of international attention invaded the city, associated with the fact that infrastructures planned in the context of 2001 only opened several years later, like Casa da Música (2005). It remains unclear if there was any impact on cultural and creative entrepreneurship (Cohen 2006) or if it contributed to economic recession.

### 5.3.2. Resilience: economic recession

Resilience was the next important evolutionary dynamic of an entrepreneurial ecosystem identified in literature, which can only be assessed by looking at the consequences following an internal or external shock. The possible outcome of a shock is two-fold: if the ecosystem is resilient, the ecosystem continues to grow or is not negatively affected, whereas if the ecosystem is weakened, it means it is not resilient and it loses resources and connectivity (Spigel & Harrison, 2018). Hence, the reaction of Porto's ecosystem to the Portuguese economic recession (essentially 2009-2014) and the change in the city council following the municipal election (2013) were analyzed. To do so, the participants were asked about the evolution of the cultural and

creative sector in the city since 2008 and the perceived changes caused by the two events.

Starting by the effects of economic recession on local cultural and creative entrepreneurial activities, the result varied according to the area of activity. The answers can be divided in effects on supply and demand. Regarding demand, for those activities associated with leisure, entertainment and nightlife, considered to have a therapeutic purpose, and with a more inexpensive character, sales were less affected and in some cases are said to have registered increases, as literature suggested (Pratt, 2009). The scenario differed in the case of cultural activities with a less functional purpose, arguably not seen as a necessity:

During crisis, people need an escape regardless of having little money, and these venues usually do not suffer with crisis... People need to release tension... I think that was not the case of culture. Concerts are more expensive, there was a decrease in the number of visitors ('Becas', interview)

Nightlife did not lose people [during crisis], did it? I think people go out more, have more free time (Rodrigo, interview).

Similarly, a decrease in demand for creative products targeting niche audiences, commonly perceived as expensive, might indeed have caused an increase in entrepreneurship. However, it fits the description of forced entrepreneurship resulting from worsening work conditions (Oakley, 2014) and may not be seen as a desirable outcome:

Ephemeral architecture is created because of crisis, because architects couldn't build houses... something small, it's ephemeral... it's not expensive. All young architects do ephemeral architecture (Luis, interview).

I did not feel entrepreneurship, on the contrary, I felt everyone was leaving (Nuno, interview).

The increase of emigration motivated by crisis is a clear case of loss of resources (talent), which shows the ecosystem was weakened to some extent (Isenberg, 2010; Spigel & Harrison, 2018), questioning its resilience. Nonetheless, the following interesting observation was made:

I think the sector is very resilient, because in reality it lives in permanent crisis (Cristina)

When questioned about the entrepreneurial motivation, there was no direct association with economic crisis. Several entrepreneurs described the necessity to satisfy a personal need, which was missing on the supply side, as the main motive to start their own activity. The *push* theory that negative factors activate latent

entrepreneurial talent and stimulate individuals into business activities (Valdez, 1988) was confirmed in one subjective case which does not reflect a shared environment:

I always imagined myself being a ceramist. I worked 22 years in a dear profession (...) I always managed to be creative, until the moment I did not. That is what made me change my life. (...) I thought a lot about myself when I opened this space (...) [while at the previous job], I was looking for spaces which could fit my busy schedule and my budget constraints, and I could not find any... (Teresa, entrepreneur).

### 5.3.3. Resilience: change of city council

The second shock testing the ecosystem's resilience was the change of city council after 12 years in 2013. Unlike crisis, the interviewees unanimously agree that this was as a very positive change, increasing the ecosystem's resilience, and a great incentive for the cultural and creative sector, sparking a climate of optimism among entrepreneurs and policymakers. The mayor, Rui Moreira, and the former alderman for culture, Paulo Cunha e Silva, were repeatedly referred as main actors of this positive development on the policy side:

There was a radical transformation since Rui Rio left the city council (...). There used to be almost a persecution of cultural workers. (...) With Rui Moreira, the rhetoric inverted substantially. He seems extremely worried about culture. I think he genuinely has that passion for culture, and for Porto's identity to be associated to culture. He realized that even in economic terms (...) culture is essential (Gustavo, entrepreneur).

After Rui Rio, there was really a revolution in the city. Rui Moreira, with the help of Paulo Cunha e Silva, managed to activate all the cultural agents in the city, activate the spaces, activate and motivate the city to participate in cultural activities. That was incredible, it was unique (Daniel, entrepreneur).

I think the ecosystem is very resilient. In Porto there is not so much dependence on subsidies. And I think Paulo Cunha e Silva managed to make the society more dynamic (Joana, expert).

We receive a lot of recognition. Paulo Cunha e Silva used to say he did not have to worry about Campanhã, because we were his "local representatives" (...) nowadays we can be proud to say we are from Porto, while some years ago it was "look at those villagers". It is hard to find a handicap in the city council's program of cultural intervention... it is very avant-garde (Manuela, entrepreneur).

The respondents added that this new city council is exceptionally open to listen voices of the sector. This was confirmed by an immediate response to the announcement of national subsidy cuts for the arts and related activities during the interview process. The city council invited all interested citizens for a conference in order to discuss a plan of action, which was later signed by the participants and sent to the Ministry of Culture in Lisbon. In the meantime, the Ministry of Culture has announced that the rules will

be revised according to the suggested improvements to ensure a fairer regional distribution (Appendix E). It is important to note that when asked if they would vote for the current council, several hesitated and the majority left suggestions for improvement, such as to impose restrictions on excessive tourism, create more financial support for emerging talents and to decentralize cultural planning.

#### 5.3.4. Sustainability: opportunities and threats

The last evolutionary dynamic to be analyzed is sustainability, or the capacity to maintain growth in positive terms and prevent its decline, greatly attributed to the responsibility of policymakers (Mack & Mayer, 2016). Opportunities and threats to growth were identified according to recent developments perceived by the interviewees. The first opportunity is that the current city council was reelected in 2017 and will remain in office until 2021, which can be interpreted as a sign of satisfaction by local citizens and reinforces stability in terms of local policy. Moreover, underdeveloped areas of the city, especially Campanhã, are attracting increasing investments for the cultural and creative sector: a new public music library (Fonoteca Municipal) with 34 thousand vinyl records and an ambitious creative hub in a former slaughterhouse (Matadouro Municipal), signed by Japanese architect Kengo Kuma, with a budget of 40 million euros, have been announced. In spite of this, there is still some concern regarding such planned development of the city by institutions (top-down):

Matadouro and the big investment in Campanhã, I don't know if it's gonna work because it's getting too institutionalized (Luis, entrepreneur).

The continuous internationalization of the city and diversification of demand have helped the city to recover economically after crisis, which confirms that tension between diversity and coherence to some extent is positive for the ecosystem (Roundy et al., 2017). However, this internationalization has accentuated the fast inflation of local prices. According to data from Statistics Portugal (2018), real-estate prices in Porto increased by 17.6% in the last quarter of 2017 compared to the same period in 2016. Campanhã remains the most affordable area of the city, the only with median values up to 900 euro per square meter, against up to 1955 euro per square meter in the most expensive areas of the city (e.g. historic center and Foz).

I hope there will be less tourism (...) prices here are getting ridiculous. My intern is looking for a place and found a two-room apartment for 600 euros. When I arrived in Portugal, 5 years ago, a three-room apartment was 400 euros at most. And it was expensive (David, entrepreneur)<sup>5</sup>

The low public investment in culture from the central government and subsidy cuts, such as the ones felt recently, can compromise the sustainability of those activities like Sonoscopia that are highly dependent (40 percent of revenue).

I just find it a pity that when you go through a crisis, the first thing that is immediately cut is culture (...) I find it hard to think that currently not even 1% of the national budget is given for culture (André, entrepreneur).

Lastly, a mismatch between available and demanded skills in terms of human resources has been signaled by the city council, possibly explained by the significant emigration of skilled labor during crisis and the increasing demand by foreign investors. According to a publication promoted by the city council, creative industries associated with ICTs (advertisement, graphic design and programming) are growing in demand and may soon face a shortage of available workers (Talent Portugal, 2017)

There is a mismatch between supply and demand, because there are some professions that have a huge demand, but there is no supply in terms of students who want to enroll in those degrees (Joana, experts).

---

<sup>5</sup> Note: as a reference value, the current minimum wage in Portugal is 580 euro

## Chapter 6: Conclusion

This study had the aim to explain the evolution of cultural and creative entrepreneurship in Porto as the result of interactions between entrepreneurs and the elements of the entrepreneurial environment over time. The question guiding this research was: *how has Porto's cultural and creative entrepreneurial ecosystem evolved since 2008?* A conclusion during the literature review was that, in order to answer the question, it was necessary to consider the territorial embeddedness of Porto and background conditions of the evolution before 2008 as well, given the holistic character of entrepreneurial ecosystems.

Overall, the experience of entrepreneurs and experts was converging and in line with analyzed quantitative data. Starting by the interactions between entrepreneurs and the entrepreneurial environment, it is possible to say that Porto's physical location and quality of life have been important favorable conditions for entrepreneurship. The main reasons are being relatively affordable, with a relaxed environment due to its medium scale, well served in terms of infrastructures and connectivity and with a vibrant cultural life. However, the lack of diversity of local demand and the peripheral position in the European context have been obstacles for those targeting niche audiences and who highly depend on inputs from abroad.

The education institutions of the city have played a big role as well, not only in the supply of entrepreneurs and skilled labor working at entrepreneurial activities, but also increasing the diversity of local demand. Art schools, like the Fine Arts faculty, are said to attract niche audiences on which some entrepreneurial activities have highly depended. Universities in general have attracted exchange students, who defy traditional mentalities with new perspectives. Besides, they are responsible for the transfer of knowledge between academia and entrepreneurial activities through formal networks like incubators. The case of University of Porto's incubator for creative industries UPTEC PINC is a notable example, being able to promote exchanges between tenants while still providing them with enough independence.

This incubator has been an exceptional case of successful institutional support. Many top-down initiatives have failed to meet the initial expectations. The short life of the Creative Industries Agency (ADDICT) is an example, as it was created to officialize

the Northern Portugal Cluster of Creative Industries, but this was never accomplished due to lack of efficiency and actual entrepreneurs in the management board. Informal collaboration, on the other hand, has been extremely important and is particularly strong in Porto when compared to other bigger cities like Lisbon. Porto acts as the *capital* of the Northern Cluster, and there have been important interactions in the cultural and creative sector with other cities within an 80 kilometer radius like Guimarães, Braga and Aveiro.

Entrepreneurs in the for-profit sector have barely depended of public support. The influence of policymakers was more visible in terms of formal institutions (legal and tax systems). One explanation was the hostile attitude towards the cultural sector by the local government under Rui Rio, between 2002 and 2013. With the new local government since 2013, there has been an improvement of public support. Nonetheless, this support is seen as passive. Private leaders, mostly bottom-up, have had the biggest share of responsibility for entrepreneurial activities in Porto within the analyzed time frame.

Now turning to the evolutionary dynamics, the European Capital of Culture program in 2001 was indeed a turning point for the city, especially in terms of urban redevelopment. It is possible to say that the ecosystem was emerging in the birth phase from 2001 until 2006, when it entered the growth phase, where it is still today. This is supported by data which shows a slow increase of number of entrepreneurial activities in the sector since 2001 and more significant increases from 2006.

The entrepreneurial ecosystem was not completely resilient to economic recession. Although activities related to entertainment and nightlife seem to have been less affected, they too had to adapt to new ways of consumption, for instance by serving drinks on the street without charging an entrance fee. The few cases registering increases were essentially forced entrepreneurship due to worsening work conditions. The rise of emigration represents a loss of resources.

The ecosystem became more resilient with the change of local government in 2013, seen as a positive shock. Rui Moreira, the current mayor, and Paulo Cunha e Silva, the former alderman for culture, are considered the main public leaders in that development. The city council's prompt response to national art subsidy cuts, by inviting the community to a public debate where a petition addressing the central

government was prepared and signed together the audience, shows an unprecedented level of commitment and support to the sector. However, there is room for improvement and there are threats to the ecosystem. Mismanagement of increasing touristic pressure is one of the biggest critiques.

Regarding sustainability, some recent developments are seen as opportunities and threats. On the opportunities side there are big projects for unexplored areas of the city, especially Campanhã, where several new facilities have been announced. However, there is some skepticism regarding institutional (top-down) initiatives. Also seen as an opportunity is the fact that this local government will stay until 2021. For the local economy, the fast internationalization of the city is an opportunity, although at the cost of a fast inflation of local prices, which is threatening entrepreneurs with lower financial capacity. Another threat is the unequal distribution of public funding on a national level, mostly concentrated in the capital, and subsidy cuts announced recently, especially for activities in the non-profit sector. The last identified threat is an eminent shortage of certain types of skilled labor, possible due to high emigration levels in previous years and increasing demand by foreign investors.

This study has some implications for theory. Using the entrepreneurial ecosystem approach to study cultural and creative entrepreneurship, considering the interactions and evolutionary dynamics, lead to valuable insights about a city's development and proved to be possible despite much criticism. Physical location and quality of life confirmed to be very important factors of the entrepreneurial ecosystem when considering a territorial boundedness (Mason & Brown, 2014), which have been undermined in previous studies (e.g. Sussan & Acs, 2017). As suggested by Roundy et al. (2017), diversity and coherence seem necessary tensions in entrepreneurial ecosystems. The challenge lies in reaching an optimum balance between high diversity while still coherent. Privatization of leadership (2015) and bottom-up processes (Stam & Spigel, 2018) deserve more attention in future studies. Considering the entrepreneurial ecosystem a holistic approach, territorial embeddedness (Selada et al., 2012) and background conditions should be taken into account when explaining the evolution over a certain time frame.

There are also implications for policymakers. The first is that they should adjust the tax levels imposed on new entrepreneurial activities to a fair level, different from



the one imposed on mature businesses. If there is a change in the legal requirements, entrepreneurs should be notified in advance and given some time to adjust to the new regulation without being penalized. Top-down initiatives without considering the needs of those who are addressed can lead to unexpected results. As Scott (2006) defended, creativity should be organically developed and not suddenly imposed. They should create forms of support which allow entrepreneurs to act independently, such as small credits with low interest rates. Also, they should listen to the problems identified by the local population and prioritize them over simple economic return. They should make their best to preserve important traditions and unique characteristics of places while promoting cultural diversity.

Finally, it is important to note the limitations of this research. The first limitation is that only entrepreneurial activities surviving until 2018 were analyzed, which excluded failed entrepreneurship. Since it was not possible to perform a longitudinal study, it was necessary to interview the founders of activities at different points in time, as the purpose was to explain the evolution, which made it hard to compare their performances. The size of the sample was relatively small and their views are subjective, influenced by their specific location in the city, type of activity and previous experiences. Therefore, these results may not be generalizable to all cultural and creative entrepreneurs in Porto, even though they were triangulated with the views of experts and quantitative data from reports to increase their consistency. Moreover, only the views of two stakeholder groups were collected. A research including more types of stakeholders might lead to different results.

## References

- Acs, Z. J. (2010). High-impact entrepreneurship. In *Handbook of entrepreneurship research* (pp. 165-182). Springer, New York, NY.
- Acs, Z. J., Stam, E., Audretsch, D. B., & O'Connor, A. (2017). The lineages of the entrepreneurial ecosystem approach. *Small Business Economics*, 49(1), 1-10.
- ADDICT Creative Industries Portugal (2016). *A Economia Criativa em Portugal*. Retrieved from: [https://issuu.com/addict-creativeeconomy/docs/addict\\_economia\\_criativa\\_vf](https://issuu.com/addict-creativeeconomy/docs/addict_economia_criativa_vf)
- Ahmad, N., & Hoffmann, A. (2008). A framework for addressing and measuring entrepreneurship
- Balsas, C. J. (2004). City centre regeneration in the context of the 2001 European capital of culture in Porto, Portugal. *Local economy*, 19(4), 396-410.
- Bathelt, H., Malmberg, A., & Maskell, P. (2004). Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation. *Progress in human geography*, 28(1), 31-56.
- Bauman, Z. (2013). *Liquid love: On the frailty of human bonds*. John Wiley & Sons.
- Bramão, R. (2016, November 23). *249 festivais de música em Portugal no ano de 2016* [APORFEST study – final version]. Retrieved from: <http://www.aporfest.pt/single-post/2016/09/22/243-festivais-de-m%C3%BAAsica-em-Portugal-no-ano-de-2016-estudo-Aporfest>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brown, R., & Mason, C. (2017). Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems. *Small Business Economics*, 49(1), 11-30.
- Bryman, A. (2012). *Social research methods*. Oxford university press
- Burton, C. (2003). Scoping the Challenge: Entrepreneurial Arts Management in Times of Uncertainty, *The Journal of Arts Management, Law, and Society*, 33:3, 185-195,
- Chapain, C., & De Propriis, L. (2009). Drivers and processes of creative industries in cities and regions.
- Cohen, B. (2006). Sustainable valley entrepreneurial ecosystems. *Business Strategy and the Environment*, 15(1), 1-14.
- Culture for Cities and Regions (2015) *ADDICT: Regional hot spots of creative industries*. Retrieved from:

[http://nws.eurocities.eu/MediaShell/media/North%20Portugal\\_ADDICT\\_01072015.pdf](http://nws.eurocities.eu/MediaShell/media/North%20Portugal_ADDICT_01072015.pdf)

- Culture for Cities and Regions (2017) *Future creative cities: Why culture is a smart investment in cities*. Retrieved from KEA European Affairs website: [http://www.keanet.eu/wp-content/uploads/Future\\_creative\\_cities\\_.pdf](http://www.keanet.eu/wp-content/uploads/Future_creative_cities_.pdf)
- Daniel, L., Medlin, C. J., O'Connor, A., Statsenko, L., Vnuk, R., & Hancock, G. (2018). Deconstructing the entrepreneurial ecosystem concept. In *Entrepreneurial Ecosystems* (pp. 23-44). Springer, Cham.
- Eichenbaum, M., Rebelo, S., & Resende, C. (2016, July 6). *The Portuguese Crisis and the IMF* [IEO Background Paper] Independent Evaluation Office of the International Monetary Fund. Retrieved from: [https://fronteirasxxi.pt/wp-content/uploads/2017/06/EAC\\_\\_BP\\_16-02\\_05\\_The\\_Portuguese\\_Crisis\\_and\\_the\\_IMF-v2.pdf](https://fronteirasxxi.pt/wp-content/uploads/2017/06/EAC__BP_16-02_05_The_Portuguese_Crisis_and_the_IMF-v2.pdf)
- European Commission (2018, May 22) *A New European Agenda for Culture*. Retrieved from: [https://ec.europa.eu/culture/sites/culture/files/commission\\_communication\\_-\\_a\\_new\\_european\\_agenda\\_for\\_culture\\_2018.pdf](https://ec.europa.eu/culture/sites/culture/files/commission_communication_-_a_new_european_agenda_for_culture_2018.pdf)
- Florida, R. (2003). Cities and the creative class. *City & community*, 2(1), 3-19.
- Franco, M., Haase, H., & Correia, S. (2015). Exploring factors in the success of creative incubators: A cultural entrepreneurship perspective. *Journal of the Knowledge Economy*, 1-24.
- Galloway, S., & Dunlop, S. (2007). A critique of definitions of the cultural and creative industries in public policy. *International journal of cultural policy*, 13(1), 17-31.
- Garnham, N. (2005). From cultural to creative industries: An analysis of the implications of the "creative industries" approach to arts and media policy making in the United Kingdom. *International journal of cultural policy*, 11(1), 15-29.
- GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH). (2018, February). *Guide for Mapping the Entrepreneurial Ecosystem. Observe – Analyse – Visualise*. Retrieved from: [http://c.ymcdn.com/sites/ande.site-ym.com/resource/dynamic/blogs/20180326\\_164606\\_18189.pdf](http://c.ymcdn.com/sites/ande.site-ym.com/resource/dynamic/blogs/20180326_164606_18189.pdf)
- Guerra, P. (2013) Cluster das Indústrias Criativas do Norte de Portugal. *Revista da Faculdade de Letras – Geografia – Universidade do Porto III série*, vol. 2 2013, pp. 249-268. Retrieved from: <https://repositorio-aberto.up.pt/bitstream/10216/83117/2/77383.pdf>
- Hall, C. M. (2006). Urban entrepreneurship, corporate interests and sports mega-events: the thin policies of competitiveness within the hard outcomes of neoliberalism. *The Sociological Review*, 54(s2), 59-70.

- Henry, C. (Ed.). (2007). *Entrepreneurship in the creative industries: an international perspective*. Edward Elgar Publishing.
- Higgs, P., & Cunningham, S. (2008). Creative Industries Mapping: Where have we come from and where are we going?. *Creative industries journal*, 1(1), 7-30.
- Hitters, E. (2007). Porto and Rotterdam as European Capitals of Culture: Toward the festivalization of urban cultural policy. *Cultural tourism: Global and local perspectives*, 281-301.
- IETM (2018, May 29) Contemporary performing arts in Portugal: an overview. Retrieved from: [https://www.ietm.org/en/system/files/publications/ietm\\_mapping-portugal\\_2018.pdf](https://www.ietm.org/en/system/files/publications/ietm_mapping-portugal_2018.pdf)
- Isenberg, D. (2010). How to start an entrepreneurial revolution. *Harvard business review*, 88(6), 40-50.
- Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. *Presentation at the Institute of International and European Affairs*.
- Jeffcutt, P. (2004). Knowledge relationships and transactions in a cultural economy: Analysing the creative industries ecosystem. *Media International Australia incorporating Culture and Policy*, 112(1), 67-82.
- KEA European Affairs. (2006). *The Economy of Culture in Europe*. Retrieved from <http://www.keanet.eu/ecoculture/studynew.pdf>
- KEA European Affairs. (2009). *The Impact of Culture on Creativity*. Retrieved from: <http://www.keanet.eu/docs/impactculturecreativityfull.pdf>
- Klamer, A. (2011). Cultural entrepreneurship. *The Review of Austrian Economics*, 24(2), 141-156.
- Landry, C. (2012). *The creative city: A toolkit for urban innovators*. Earthscan.
- Le Gall, A., Fleming, T. (2016) *Study Visit in Norte Portugal Region, 17 - 19 February 2016 report*. Retrieved from Culture for Cities and Regions website: [http://nws.eurocities.eu/MediaShell/media/Study%20visit%20report\\_Northern%20Portugal\\_02052016.pdf](http://nws.eurocities.eu/MediaShell/media/Study%20visit%20report_Northern%20Portugal_02052016.pdf)
- Mack, E., & Mayer, H. (2016). The evolutionary dynamics of entrepreneurial ecosystems. *Urban Studies*, 53(10), 2118-2133.
- Marques, L. (2017). Creative Clusters in Urban Spaces. *The SAGE Handbook of New Urban Studies*, 343.
- Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth oriented entrepreneurship. *Final Report to OECD, Paris*, 30(1), 77-102.

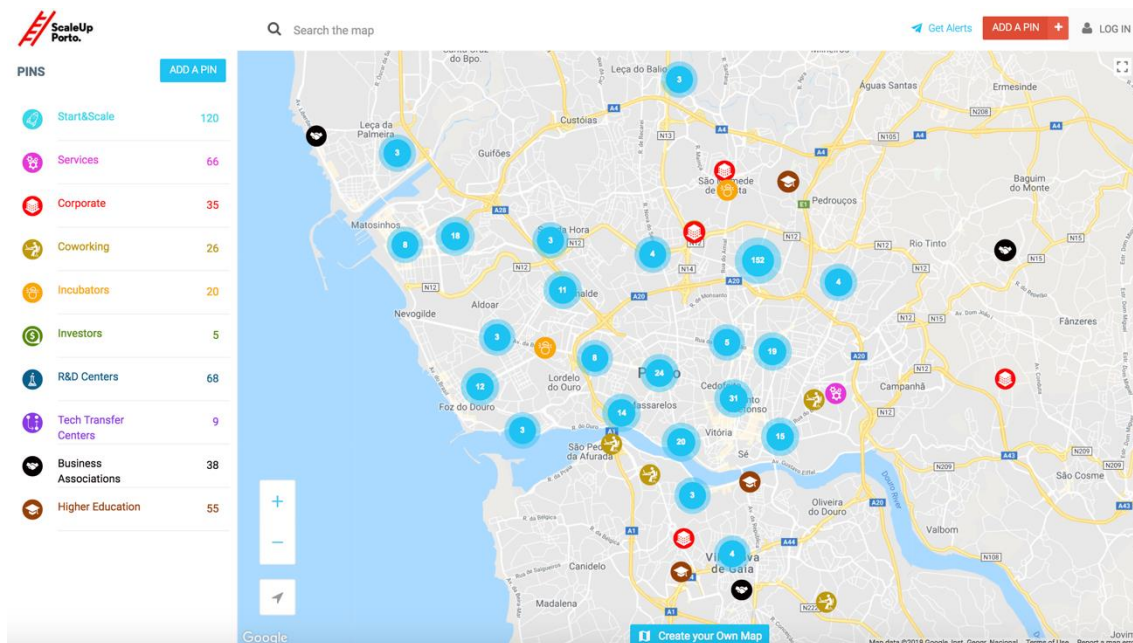
- Motoyama, Y., & Knowlton, K. (2017). Examining the connections within the startup ecosystem: A case study of st. louis. *Entrepreneurship Research Journal*, 7(1).
- Nambisan, S., & Baron, R. A. (2013). Entrepreneurship in innovation ecosystems: entrepreneurs' self-regulatory processes and their implications for new venture success. *Entrepreneurship Theory and Practice*, 37(5), 1071-1097.
- Neck, H. M., Meyer, G. D., Cohen, B., & Corbett, A. C. (2004). An entrepreneurial system view of new venture creation. *Journal of Small Business Management*, 42(2), 190-208.
- New Europe Brussels (2004, July 4). *Can Euro 2004 stadiums pay off for Portugal?* Retrieved from: <https://www.neweurope.eu/article/can-euro-2004-stadiums-pay-portugal/>
- O'Connor, A., Stam, E., Sussan, F., & Audretsch, D. B. (2018). Entrepreneurial Ecosystems: The Foundations of Place-based Renewal. In *Entrepreneurial Ecosystems* (pp. 1-21). Springer, Cham.
- Oakley, K. (2014). Good work? Rethinking cultural entrepreneurship. *Handbook of management and creativity*, 145-159
- Pitelis, C. (2012). Clusters, entrepreneurial ecosystem co-creation, and appropriability: a conceptual framework. *Industrial and Corporate Change*, 21(6), 1359-1388.
- Pratt, A. C. (2009). The creative and cultural economy and the recession. *Geoforum*. Volume 40, Issue 4, July 2009, Pages 495-496
- Report of THE OMC (Open Method of Coordination) working group of Member States' experts – Study (2018). The role of public policies in developing entrepreneurial and innovation potential of the cultural and creative sectors. *European Agenda for Culture, Work Plan for Culture 2015-2018*. EU Publications. Retrieved from: <https://publications.europa.eu/en/publication-detail/-/publication/5d33c8a7-2e56-11e8-b5fe-01aa75ed71a1/language-en#>
- Richards, G., & Wilson, J. (2004). The impact of cultural events on city image: Rotterdam, cultural capital of Europe 2001. *Urban studies*, 41(10), 1931-1951.
- Roundy, P. T., Bradshaw, M., & Brockman, B. K. (2018). The emergence of entrepreneurial ecosystems: A complex adaptive systems approach. *Journal of Business Research*, 86, 1-10.
- Roundy, P. T., Brockman, B. K., & Bradshaw, M. (2017). The resilience of entrepreneurial ecosystems. *Journal of Business Venturing Insights*, 8, 99-104.
- Rui Moreira incentivou a instalação das indústrias criativas e culturais em Campanhã. *Cumpriu* (2017, May 29). Retrieved from: <http://ruimoreira2017.pt/ruimoreira-incentivou-instalacao-das-industrias-criativas-e-culturais-em-campanha-cumpriu/>

- Savić, J. (2017). Sense (s) of the city: Cultural mapping in Porto, Portugal. *City, Culture and Society*, 11, 12-19.
- Scaleup Porto (2017) *Porto Start and Scale Up Guide 2017*. Retrieved from: [https://issuu.com/scaleupporto/docs/porto\\_start\\_scale\\_guide](https://issuu.com/scaleupporto/docs/porto_start_scale_guide)
- Scaleup Porto (2018, May 21) *Hostelworld instala-se no Porto e está a recrutar*. Retrieved from: <http://scaleupporto.pt/pt/hostelworld-instala-se-no-porto-e-esta-recrutar/>
- Scott, A. J. (2006). Entrepreneurship, innovation and industrial development: geography and the creative field revisited. *Small business economics*, 26(1), 1-24.
- Scott, A. J. (2010). Cultural economy and the creative field of the city. *Geografiska Annaler: series B, human geography*, 92(2), 115-130.
- Selada, C., Da Cunha, I. V., & Tomaz, E. (2012). Creative-based strategies in small and medium-sized cities: key dimensions of analysis. *Quaestiones Geographicae*, 31(4), 43-51.
- Serralves (2008) *Estudo Macroeconomico Desenvolvimento de um Cluster de Industrias Criativas da Regiao do Norte*. Retrieved from: <https://www.serralves.pt/fotos/editor2/inserralves/Estudo%20Macroeconomico%20Desenvolvimento%20de%20um%20Cluster%20de%20Industrias%20Criativas%20da%20Regiao%20do%20Norte.pdf>
- Shane, S. (2011). The great recession's effect on entrepreneurship. *Economic Commentary Federal Reserve Bank of Cleveland*.
- Sousa, F. C., Nunes, F., & Monteiro, I. P. (2016). Criatividade e inovação empresarial nas indústrias criativas. *TPA-Teoria e Prática em Administração*, 5(2), 121-1
- Spigel, B., & Harrison, R. (2018). Toward a process theory of entrepreneurial ecosystems. *Strategic Entrepreneurship Journal*, 12(1), 151-168.
- Stam, E. (2015). Entrepreneurial ecosystems and regional policy: a sympathetic critique. *European Planning Studies*, 23(9), 1759-1769.
- Stam, E. (2018) Measuring Entrepreneurial Ecosystems. In: O'Connor, A., Stam, E., Sussan, F., Audretsch, D.B. (eds) *Entrepreneurial Ecosystems. Place-Based Transformations and Transitions*. New York: Springer. pp.173-196.
- Stam, E., Spigel, B. (2018). Entrepreneurial ecosystems. In: Blackburn R, De Clercq D, Heinonen J, Wang Z (eds) (2017) *Handbook for entrepreneurship and small business* (pp. 436-451). SAGE, London.
- Stangler, D., & Bell-Masterson, J. (2015). Measuring an entrepreneurial ecosystem. *Kauffman Foundation Research Series on City, Metro, and Regional Entrepreneurship*, 1-16.

- Statistics Portugal (2018) *Estatísticas de Preços da Habitação ao nível local*. Retrieved from:  
[https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_destaques&DESTAQUESdest\\_boui=315218748&DESTAQUESmodo=2](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=315218748&DESTAQUESmodo=2)
- Sussan, F., & Acs, Z. J. (2017). The digital entrepreneurial ecosystem. *Small Business Economics*, 49(1), 55-73.
- Swedberg, R. (2006). The cultural entrepreneur and the creative industries: beginning in Vienna. *Journal of cultural economics*, 30(4), 243-261.
- Talent Portugal (2017). *Mapa de Talento*. Retrieved from:  
[https://www.investporto.pt/fotos/editor2/mapatalento/mapa\\_talento\\_porto\\_norte\\_apresentacao\\_pt.pdf](https://www.investporto.pt/fotos/editor2/mapatalento/mapa_talento_porto_norte_apresentacao_pt.pdf)
- The Aspen Institute (2013) *Entrepreneurial Ecosystem Diagnostic Toolkit, Studying the Entrepreneurial Ecosystem*. Retrieved from:  
[https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft\\_print%20version.pdf](https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft_print%20version.pdf)
- Throsby, D. (2008). The concentric circles model of the cultural industries. *Cultural trends*, 17(3), 147-164.
- Valdez, J. (1988). The entrepreneurial ecosystem: toward a theory of new business formation. *Small Business Institute Director's Association*.
- Werthes, D., Mauer, R., & Brettel, M. (2018). Cultural and creative entrepreneurs: understanding the role of entrepreneurial identity. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 290-314.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. Sage publications.

## Appendix

### A. Mapping Porto's entrepreneurial ecosystem

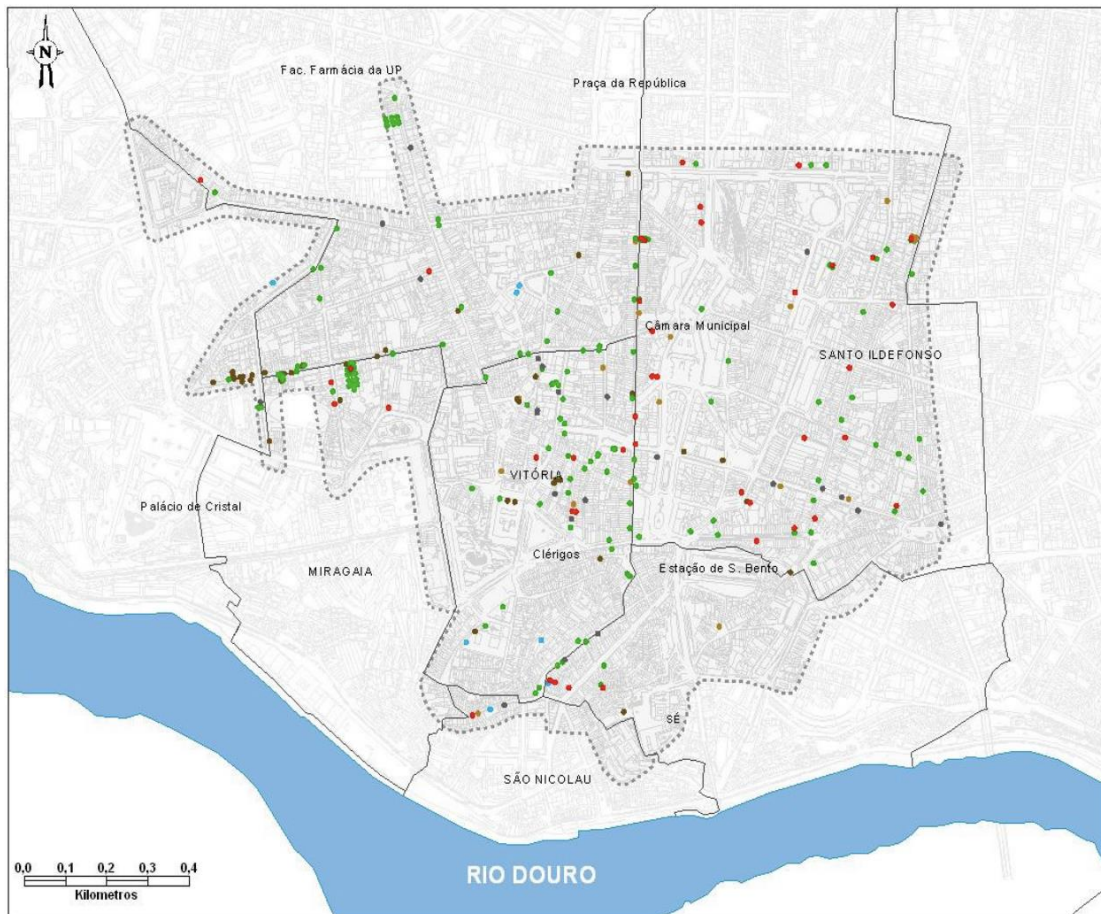


Porto's entrepreneurial ecosystem in numbers (top) and interactive map (bottom)  
(ScaleUp Porto, 2018)





Representation of Porto's entrepreneurial network  
(adapted from Savić, 2017)



Map of the cultural and creative sector in Porto's city center by type of activity (Serralves, 2008) n= 247

**Red:** Creative enterprises; **Purple:** night entertainment; **Green:** commercial venues; **Dark Brown:** cultural venues; **Blue:** artistic education institutions; **Light Brown:** cultural organizations. 90% (n=222) are from the private sector

## B. Overview of interview subjects

#	PERSONAL DATA							INTERVIEW		
	Name	Age	Position	Activity (founded in)	Type	Sector	Further Experience	Date (dd.mm.yyyy)	Place	Duration (minutes)
<b>ENTREPRENEURS</b>										
1	André	35	Co-founder, director	Amplificasom (2006)	Company	Music event promoter	Artist manager, logistics	3.04.2018	Arca Pub	53.33
2	Teresa	50	Founder, director	Brâmica (2016)	Company	Crafts (ceramics)	Social service (Porto municipality)	5.04.2018	Brâmica	69.19
3	David	29	Co-founder, fashion designer	David Catalán (2015)	Company	Fashion	Night club door	5.04.2018	Home	24.08
4	Luís	30	Executive Producer (on behalf of founder João)	Canal 180 (2011)	Company	Arts & culture audiovisual media	Co-founder of OPO'Lab, Get Set Festival, cultural events	3.04.2018	Canal 180	60.10
5	Daniel	47	Founder, director	Maus Hábitos/Saco Azul (2001)	Company & non-profit organization	Creative hub (restaurant, bar, night club, gallery)	Photographer, board of ADDICT, cultural advisor	5.04.2018	Maus Hábitos	72.58
6	Manuela	68	Co-founder, director	MIRA Galerias (2013)	Private	Gallery and performing arts venue	High-school teacher, publishing	31.03.2018	MIRA Galerias	78.51
	João	68	Co-founder, director				Banking			
7	Rodrigo	35	Co-founder, media designer	Openfield (2016)	Company	Media arts (crossover art and technology)	Researcher (PhD)	29.03.2018	Openfield	46.03
	Nuno	40	Co-founder, architect				Architecture studio			
8	'Becas'	67	Founder, owner	Passos Manuel (2004)	Company	Night club, cinema and concerts	Cultural venue and bar owner	29.03.2018	Passos Manuel	30.32
9	Gustavo	42	Co-founder, director	Sonoscopia (2008)	Non-profit organization	Experimental sound lab	Researcher (PhD), Professor, cultural events	3.04.2018	Sonoscopia	55.16

EXPERTS										
10	Cristina	-	Executive director (2010 – 2014)	ADDICT (2008)	NGO	Cultural and creative industries policy	Member of ECoC Committee, independent policy advisor, member of several European networks, Quartenaire, Researcher (PhD), Professor,	31.03.2018	Jardins do Palácio de Park	88.1
11	Joana	-	Executive director (2015-2016)				Vice-director of Portuguese Arts Council (DGArtes) Chief Talent Officer of Porto Municipality, Designer, worked in Sillicon Valley	29.04.2018	Café near Porto City Hall	43.38
									Total	<b>620.78 (=10.35h)</b>

*Cultural and creative sectors, part of the creative economy  
(Source: own elaboration, adapted from KEA 2006)*

	Sector	Sub-sector	Output Characteristics	Examples
Creative Economy (knowledge-based)	Cultural sector	Arts and cultural activities	Non-reproducible cultural and experience goods. Intellectual purpose. Non-profit oriented.	Visual Arts Performing Arts Museums Libraries Cultural events Heritage sites
		Cultural industries	Reproducible cultural products. Depend on cultural inputs. Intellectual or entertainment purpose. May be profit or non-profit oriented.	Music Cinema Photography Media & Communication (radio, audiovisual, new media)  Publishing
	Creative sector	Creative industries and activities	Reproducible products or prototypes, predominant functional purpose. May or not depend on cultural goods as inputs. Profit-oriented.	Architecture Design (fashion, graphic, product, interior)  Crafts Advertising Software Video games

## C. Interview guides

### Entrepreneurs

<b>INTRODUCTIONN</b>	<ul style="list-style-type: none"> <li>• When was your business founded?</li> <li>• Who are the founders?</li> <li>• What were you doing before you started this business?</li> <li>• What made you start your business?</li> <li>• How many people were working here in total when you started? What about now?</li> <li>• In general, very briefly, how do you evaluate your performance since you started?</li> </ul>
<b>CULTURE</b>	<ul style="list-style-type: none"> <li>• What did people around you say when you told them you wanted to start this activity?</li> <li>• How did the local community receive you?</li> </ul>
<b>PHYSICAL LOCATION</b>	<ul style="list-style-type: none"> <li>• Can you describe in three words how is it to have your creative business here?</li> <li>• Can you name two advantages and disadvantages of having your business based here?</li> <li>• To what extent did Porto's geographic position influence your decision of starting a business here?</li> <li>• What infrastructures in the city (e.g. public transports, venues) are the most important for a business like yours?</li> <li>• Was the city's cultural offer something important?</li> <li>• Could you imagine doing the same job being based somewhere else?</li> <li>• With internet and communication technologies, does it still matter for you where you are located?</li> </ul>
<b>FORMAL INSTITUTIONS</b>	<ul style="list-style-type: none"> <li>• How did you find the bureaucratic process of setting up your business here?</li> <li>• Is the local legal system supporting or hindering your activity?</li> </ul>
<b>EDUCATION AND TALENT</b>	<ul style="list-style-type: none"> <li>• Are local education institutions relevant for your activity?</li> <li>• Did you (the founders) study in Porto?</li> <li>• Could you estimate the percentage/amount of your employees who studied in Porto?</li> </ul>
<b>FINANCE</b>	<ul style="list-style-type: none"> <li>• Has your activity depended on any public funding (subsidy)?</li> <li>• Has your activity depended on any private funding (sponsorship, investors)?</li> <li>• Have you won any award or competition with your business? Did that have a positive impact on your performance?</li> <li>• Can you say, in percentages, what is approx. the distribution of your revenues (e.g. 40% public subsidies, 60% sales)</li> <li>• How has your economic performance going since you started?</li> </ul>

<b>DEMAND</b>	<ul style="list-style-type: none"> <li>• Who are your consumers? Can you make a short profile (age, profession...)?</li> <li>• How satisfied are you with your (local) consumers?</li> </ul>
<b>NETWORKS</b>	<ul style="list-style-type: none"> <li>• Who are your main business partners, if you have any?</li> <li>• Do you often collaborate with other organizations in the city?</li> <li>• Who are your main competitors?</li> <li>• Being in Porto, do you feel part of a creative ecosystem?</li> <li>• Do you feel that Porto itself is also part of a bigger creative ecosystem(s) (network of creative cities, Portuguese ecosystem, European, worldwide)?</li> <li>• What do you know about the Northern Portugal Cluster of Creative Industries? Do you feel part of it?</li> </ul>
<b>INTERMEDIARIES</b>	<ul style="list-style-type: none"> <li>• Have you considered moving to one of the creative incubators? Why/why not?</li> <li>• Did you seek help from any professional when setting up your activity?</li> <li>• Are you aware of the work of ADDICT, the national agency to promote the creative industries, entity representing the Cluster based in Porto?</li> </ul>
<b>EVOLUTIONARY DYNAMICS</b>	<ul style="list-style-type: none"> <li>• How do you think the creative and cultural sector is evolving in the city since the 2008? What changes do you perceive?</li> <li>• Do you think it will continue evolving in a similar way in the coming 5 years?</li> <li>• How important was the legacy of Porto European Capital of Culture 2001 for your business?</li> <li>• How did the economic recession affect your business?</li> <li>• Some scholars believe that entrepreneurship rises as a consequence of crisis. Are you part of that phenomenon?</li> </ul>
<b>LEADERSHIP</b>	<ul style="list-style-type: none"> <li>• Do you know anything about the Program 2020 (ongoing since 2014) and its targets regarding the creative industries?</li> <li>• Are there any public leaders who have particularly contributed to your success?</li> <li>• The current city council (lead by Rui Moreira) was elected for the first time in 2013. How did that affect your activity?</li> <li>• Based on your experience so far, would you vote/support him in the upcoming elections in 2021?</li> <li>• Would you like to leave any recommendations for improvement to the local government and policymakers?</li> </ul>

## Experts

<b>INTRODUCTION</b>	<ul style="list-style-type: none"> <li>• During what time were you at ADDICT?</li> <li>• What was your position?</li> <li>• What are you doing now?</li> <li>• How was your overall experience at ADDICT?</li> <li>• May I ask why did you leave ADDICT?</li> </ul>
<b>PHYSICAL LOCATION</b>	<ul style="list-style-type: none"> <li>• Why is ADDICT in Porto, if it is a national agency?</li> <li>• Can you think of two reasons why should creative entrepreneurs choose Porto to establish a creative business?</li> <li>• Can you imagine two obstacles for creative entrepreneurs who establish a business here?</li> <li>• What were the strongest creative industries in the city over the last 10 years?</li> <li>• What were the ones facing more difficulties? The most saturated?</li> <li>• What are the most promising creative industries?</li> </ul>
<b>FORMAL INSTITUTIONS</b>	<ul style="list-style-type: none"> <li>• Considering bureaucracy, do you think it is easy to start a business in Porto?</li> <li>• Do you think the legal system supports or hinders the creative industries?</li> </ul>
<b>EDUCATION AND TALENT</b>	<ul style="list-style-type: none"> <li>• To what extent are local education institutions relevant for Porto's creative industries?</li> <li>• Do you have any data on the origin and education of entrepreneurs and creative workers in Porto?</li> </ul>
<b>FINANCE</b>	<ul style="list-style-type: none"> <li>• Are there enough public sources of funding (e.g. subsidies) for creative entrepreneurs?</li> <li>• Are there enough private sources of funding (e.g. sponsors, investors) for creative entrepreneurs?</li> <li>• How important are competitions and awards for creative businesses?</li> </ul>
<b>NETWORKS</b>	<ul style="list-style-type: none"> <li>• Is collaboration important for creative businesses to be successful?</li> <li>• Is competition important for creative businesses to be successful?</li> <li>• Being in Porto, do you feel part of a creative ecosystem?</li> <li>• Do you feel that Porto itself is also part of a bigger creative ecosystem(s) (network of creative cities, Portuguese ecosystem, European, worldwide)?</li> <li>• Do you think enough people know about the Northern Portugal Cluster of Creative Industries?</li> <li>• Do you think creative entrepreneurs feel part of it?</li> </ul>
<b>INTERMEDIARIES</b>	<ul style="list-style-type: none"> <li>• To what kind of creative businesses are incubators good for?</li> <li>• Do you believe ADDICT is successfully pursuing its goal of promoting the creative industries?</li> <li>• Apart from ADDICT, are there any other important organizations working for the same goal?</li> </ul>

<p style="text-align: center;"><b>EVOLUTIONARY DYNAMICS</b></p>	<ul style="list-style-type: none"> <li>• When would you say this creative ecosystem emerged? Was it in 2008, when Serralves identified the Northern Cluster?</li> <li>• How would you describe the development of Porto’s creative ecosystem since 2008? What main changes do you perceive?</li> <li>• Can you explain what is causing that development?</li> <li>• Will that tendency remain the same in the coming 5-10 years?</li> <li>• How resilient is this ecosystem to another financial crisis?</li> <li>• How resilient is this ecosystem if there is a change of the local government?</li> <li>• How important was the legacy of Porto European Capital of Culture 2001?</li> <li>• How did the 2008 financial crisis affect the creative sector in Porto?</li> <li>• Some scholars believe that entrepreneurship rises as a consequence of crisis. Is that what happened in Porto?</li> </ul>
<p style="text-align: center;"><b>LEADERSHIP</b></p>	<ul style="list-style-type: none"> <li>• Do you think enough people know about the Program 2020 (ongoing since 2014) and its targets regarding the creative industries?</li> <li>• Are there any public leaders/figures who have particularly contributed to this positive development?</li> <li>• The current city council (lead by Rui Moreira) was elected for the first time in 2013. How did that affect the creative sector?</li> <li>• Based on your experience so far, do you think he will win the upcoming election in 2021?</li> <li>• Would you like to leave any recommendations for improvement to the local government and policymakers?</li> </ul>

## D. Coding List

<b>Themes</b>	<b>Code Definition</b>
<b>ENTREPRENEURS</b>	Date of foundation Identification of founders Origin of founders Professional experience Entrepreneurial motivation
<b>EXPERTS</b>	Professional experience Experience at ADDICT Advice for research
<b>CULTURE</b>	Acceptance by informal network Acceptance by local community
<b>PHYSICAL LOCATION</b>	Satisfaction with location Influence of geographic position on decision Influence of quality of life Dependence on physical location Dependence on local infrastructures
<b>FORMAL INSTITUTIONS</b>	Satisfaction with set-up process Influence of legal system
<b>EDUCATION AND TALENT</b>	Relationship with local education institutions Origin of human capital
<b>FINANCE</b>	Dependence on public funding Availability of public funding Dependence on private funding Availability of private funding Influence of awards on performance Revenue sources
<b>DEMAND</b>	Characterization of demand Satisfaction with demand Dependence on local demand
<b>NETWORKS</b>	Importance of collaboration Identification of partners Importance of competition Identification of competitors Perception of informal networks Perception of formal networks Ecosystem embeddedness
<b>INTERMEDIARIES</b>	Perception of intermediaries Perception of support services
<b>LEADERSHIP</b>	Influence of different policy levels Top-down vs. bottom-up processes Satisfaction with public leaders Satisfaction with private leaders Recommendations for the future
<b>EVOLUTIONARY DYNAMICS</b>	Individual performance Collective performance Ecosystem emergence Ecosystem transformation Ecosystem resilience to internal shocks Ecosystem resilience to external shocks Ecosystem sustainability



## E. Porto City Council conference on national art subsidy cuts

Place: Teatro Municipal Rivoli, Porto

Date: 3.04.2018

Time: 10 AM (GMT), 1h46m39s

Full recording: <https://soundcloud.com/miguel-j-come/conference-rivoli-on-dgates-subsidies-3042018/s-lElHo>

### Notes (own elaboration):

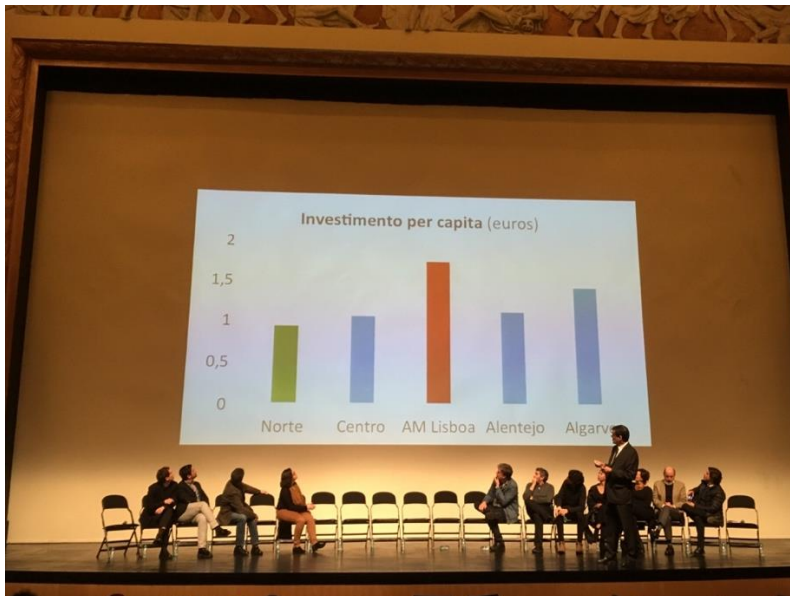
<ul style="list-style-type: none"> <li>- why did you start with the program</li> <li>- so what are the results so far</li> <li>- can you give us a name of a strong public leader?</li> <li>- can the government research institute</li> </ul> <p>Conférence Imprensa Rivoli 3.04.2018</p> <p>centralismo lisboa menos dinheiro reunião ministro cultura estrutura pública 80% dos fundos Dance/ Passos Manuel - Visavinda? Resultados Cavendo DG Antis 2018-2021</p> <ul style="list-style-type: none"> <li>- união entre estruturas, proximidade</li> <li>- colaboração para combater isto</li> <li>- reunião no dia anterior</li> <li>- problema antigo desde 2009</li> <li>- castigados porque a câmara aporia mais as arts</li> <li>- "ecossistema vibrante" (Rui Moniz)</li> <li>- unidade exemplar entre estruturas</li> <li>- a câmara ouk os cidadãos</li> <li>- Porto muito sacrificado</li> <li>- José Soares: Coimbra ainda pior</li> </ul>	<ul style="list-style-type: none"> <li>- não deve ser "luta de quintas", apesar nível de financiamento de 2009</li> <li>- (cont) todas fora de Lisboa estão mal</li> <li>- júri regional, decidido a nível central</li> </ul> <p>Tiago Cavendo:</p> <ul style="list-style-type: none"> <li>- Declarações à TSE Rui Moniz (in ouvido)</li> <li>- <u>ecossistema</u> mais saudável (2x)</li> <li>- <u>Critique Blanc</u>: cruzamentos disciplinares</li> <li>- circulante - o que é? não recebe financiamento</li> <li>- 1% antes orçamento estado</li> <li>- responsável que escolheu o júri</li> <li>- democratização, diversidade cultural</li> <li>- inovação desapareceu (André)</li> <li>- várias escalões diferentes (box, pesos diferentes)</li> <li>- calendário de julho a junho</li> <li>- demand vs supply - níveis</li> <li>- Rui Moniz: <u>ecossistema</u> viva (3x)</li> <li>- TEP: acta e insultosa</li> <li>- Alvear o que é?</li> <li>- reunião DG Antis e Ministério da Cultura <del>for</del></li> <li>- <u>insuficiente</u> financiamento escasso</li> <li>- separar viagem e programação</li> <li>- "tentam diminuir-nos"</li> <li>- 18h reunião agentes norte</li> <li>- todos agradecerem ao Presidente da Câmara por promover isto</li> <li>- herança do Salazarismo</li> </ul>
---	--

The word ecosystem ("ecossistema") was mentioned three times by the mayor (in red)

### Photos (own elaboration):



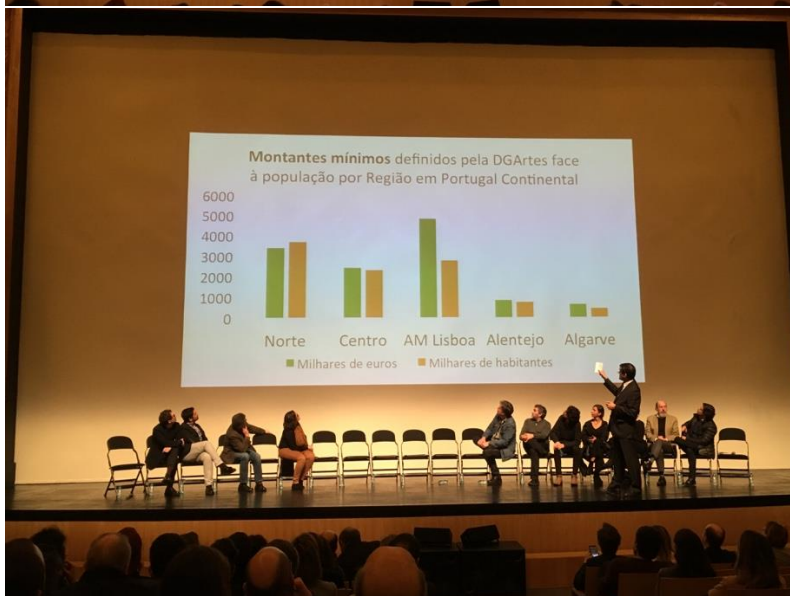
These graphs were used as evidence of the uneven regional distribution of subsidies, mostly concentrated around Lisbon.



**Title: *Investment per capita (euros)***

Red: Lisbon Metropolitan Region (“AM Lisboa”)

Green: North (including Porto) (“Norte”)

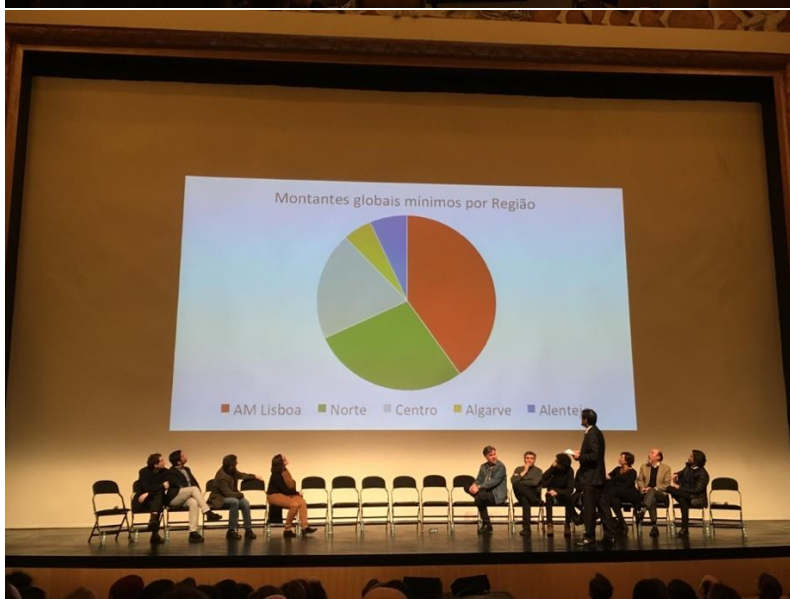


**Title: *Minimum amounts defined by DGARTES by population and region in continental Portugal***

Green: Euro (milions)

Orange: Population (milions)

Left: North, center: Lisbon Metropolitan Region



**Title: *Minimum global amounts by region***

Red: Lisbon Metropolitan Region

Green: North (including Porto)