Stimulating Creative Entrepreneurial Initiatives: A flow diagram for strategic planning

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Abstract

This paper contributes to the organizational study of the creativity applied to business innovation through the analysis of three propositions: (1) there are substantial differences between Creative Entrepreneurial Initiatives (CEIs) and non-CEIs, regarding to human capital factors, structural capital factors, intellectual property and creative value chain; (2) there are institutional, financial and educational barriers that limits the creation of CEIs in South Europe (Portugal, France, Spain), and (3) the adaptation of organizational measures of stimulus to the specificity of CEIs through a flow diagram can reduce the limiting effect of the barriers detected by CEIs. From this approach, researchers and policy makers can obtain a better understanding of the specificities of the CIEs from a sectoral, strategic and organizational focus.

Keywords: creative entrepreneurship, innovation, university, creativity

1. Introduction

Innovation and creativity favour the development of new companies, productivity, and social cohesion. According to Hartley (2008), the creative industries are located where new values, both economic and cultural, new knowledge and new forms of social relationship are emergent and the market mechanisms can adopt and spread these innovations to society. Thus, the 'creative industries' are the empirical form taken by innovation in advanced knowledge-based economies.

The consideration of the creative industries as knowledge generators are key elements of a 'positive,' or an 'emergent' economic model, because they can be seen as the locus for evolutionary growth at the fuzzy boundary between (cultural) social networks and (economic) enterprise, where markets play an important role in coordinating the adoption and retention of novelty as knowledge (Cunningham et al., 2008).

Considering this approach, in the last years, universities have gained increasing relevance as knowledge producers as well as sources of innovation in both business services (Villarreal and Calvo 2015) and technology-intensive sectors (Darby and Zucker 2006). Keeping in mind the impact of university research on the growth of individual local firms (Colombo et al. 2010), universities as a source of

innovation in the industrial sector have aimed primarily at economically peripheral regions with a low capacity for adoption and production of scientific knowledge (Shapira 2005).

Most of previous research has focused on the analysis of technologically advanced environments as the American and British models (Laursen and Salter 2004). However, in the context of the South European countries, there is a lack of continuous collaboration between universities and companies and the model of technology transfer presents important differences compared to the Anglo-Saxon and Central Europe model (Aceytuno and Caceres 2012). In these countries, although the scientific production is high, the advances in the academic side are not correctly transferred into firms´ innovation. It generates a lack of resources of innovation that can be spread to society through creative initiatives.

In this sense, there are some factors influencing the structure and dynamics of the creative industries. First, there is not a generally accepted classification of activities which are considered intrinsically creative, and the relation between the effect of innovation in creative industries and the role of the new creative industries in the innovation of other sectors is not clear (Hartley, 2008, Cunningham et al., 2008). Second, the international financial crises has generated a contraction of credit granted by financial institutions to creative industries, mostly of them SMEs, and it has also reduced the amount of resources (public and private) to support new initiatives in creative industries. These factors are even more significant in South Europe, where the effects of the financial crisis has been worse than in other countries.

This paper contributes to the organizational study of the creativity applied to business innovation through the analysis of three propositions: (1) there are substantial differences between Creative Entrepreneurial Initiatives (CEIs) and non-CEIs, regarding to human capital factors, structural capital factors, intellectual property and creative value chain; (2) there are institutional, financial and educational barriers that limits the creation of CEIs in South Europe (Portugal, France, Spain), and (3) the adaptation of organizational measures of stimulus to the specificity of CEIs through a flow diagram of strategic planning can reduce the limiting effect of the barriers detected for CEIs.

The structure of the paper begins by describing the main study models of the creative industries in the section 2, in order to set the concept of CEI by contrast with other non-creative initiatives. The

methodological approach and design study are presented in section 3. The analysis of barriers and the roadmap proposal are developed in section 4. In section 5, we present the outcomes in four categories: (1) indicators of differentiation of CEIs; (2) mapping of potential CEIs in eight regions of the Southwest of Europe; (3) barriers for the CEIs creation and (4) application of the flow diagram to a case study. Finally, in section 6 we conclude the study and suggest new lines of research.

2. Theoretical framework

According to Potts et al. (2008), creative industries are part of the innovation system, not just another industry. "The creative industries are the set of economic activities that involve the creation and maintenance of social networks and the generation of value through production and consumption of network-valorized choices in these networks" (Potts et al., 2008, p. 176).

Spite of the British Council model, the concentric circles model, the intellectual property model, and the American model of the arts offer an integrative perspective of creative activities (Fig.1), there is not a generally accepted classification of activities which are considered intrinsically creative.

Insert Figure 1. Study Models of the Creative Industries.

Creative industries are characterized by the role of the individual creativity, skills and talent in the generation of intellectual property (Galloway and Dunlop, 2007) and the way they affect innovation and competitiveness in other productive sectors, blurring the established borders. In this sense, creative products are basic inputs in other economic sectors, what facilitates the adoption and retention of new ideas or technologies in other sectors.

So, considering that creative companies are not a sector in itself, but a structural part of the innovation system of the whole of a country's economy (Potts and Cunningham 2008), we define the Creative

Entrepreneurial Initiative (CEI) as *the result of an entrepreneurial process characterized by innovation, creative interest, and the capability of creation of intellectual capital*. Following the previous definition of Potts et al. (2008), CEIs can be developed in the following industries (without excluding future extensions): (1) software and computer services, (2) cinema, video and audiovisual, (3) design, (4) handicrafts, (5) advertising, (6) architecture, (7) fashion design and (8) education software.

Following the Intellectual Capital Theory approach (Edvinsson and Malone 1997), CEIs differ according to their higher contribution of human capital of the professionals; organisational or structural capital (innovation, infrastructures and procedure capital) and relational capital (the capability of generating contact networks to increase the organisation value). In this sense, and unlike other organisations, the creative entrepreneurial initiatives often access to the use of structural capital provided by public and private institutions (telecommunication networks, university laboratories, public resources elements) without the need for taking the whole of the investment in them (Hong et al. 2008; Mendelsohn 2012).

In this sense, CEIs can differ from those entrepreneurial initiatives that are not creative in a series of factors related to human capital, structural capital, the type of products generated, and the location of its core business in a specific segment of the creative value chain. Thus, there is a gap research to get a clear approach of the specific characteristics of the creative entrepreneurial initiatives (CEIs) that includes the sectoral, strategic and organizational approaches. And because of this research gap, there are not studies about specific barriers and models of stimulus for these initiatives.

In order to contribute to fill this gap, we define the following propositions of study:

P1: There are substantial differences between CEIs and non-CEIs, regarding to human capital factors, structural capital factors, intellectual property and creative value chain.

P2. There are institutional, financial and educational barriers that limits the creation of CEIs in South Europe (Portugal, France, Spain).

P3. The adaptation of organizational measures of stimulus to the specificity of CEIs through a flow diagram can reduce the limiting effect of the barriers detected for CEIs.

3. Design study and methodological procedure

The design study was formed by three stages: First, a mapping of potential capacity to create CEIs in a sample of firms and research groups of Spain, France and Portugal and detection of barriers. Second, a proposal of stimulus model (flow diagram for strategic planning) of CEIs for these countries. Finally, the model was confronted to a case-study.

The data used were collected through the development of the European Project CREATINN (Creativity and Innovation), through a survey developed from 2011 to 2013.

In the first stage two questionnaires were designed and administered to 439 companies and 442 research groups in Spain, France and Portugal (Table 1). As a result, the researchers obtained information of both demand- and supply-side innovation throughout the time horizon 2011-2013, and a data compilation structure was defined for data gathering (Fig. 2).

Insert Table 1. Regional distribution of questionnaires.

Insert Figure 2. Data compilation structure.

In a second stage, researchers contacted with those firms that had previously shown interest in collaborating with universities in R&D (DOIs). During these meetings, these firms specified the innovative problems and barriers that they had to face, which were named “innovative inputs”. After showing the list of previously compiled innovative inputs to the university research groups, the team of the project put in touch the research groups with the firms. After the analysis of CEIs´ barriers, a model of stimulus (flow diagram) of CEIs was proposed for these countries. This methodological procedure was aimed to contrast the second proposition (P2).

In the third stage, and according to the case study methodology (Yin 2014; Villarreal and Calvo 2015), the model of stimulus was confronted to a single case-study (Mans-Paideia), in order to present an empirical evidence of the third proposition (P3).

4. Analysis of barriers and proposal of a flow diagram for strategic plannning

Entrepreneurial intention is conditioned by a set of factors acting as incentive or barrier to the entrepreneurial process: individual factors, social factors, and macroeconomic factors (Neira et al. 2012). Considering only the CEIs' sector, The Entrepreneurial Indicators Programme by OECD/EUROSTAT (2008) identifies six factors that affect the entrepreneurial activity: (1) Capital and access to financing, (2) the use of technology and R&D, (3) the entrepreneurial skills, (4) market conditions, (5) regulatory framework and (6) culture.

According to this framework, the specific barriers for the creation of CEIs in these countries have been grouped as: (a) institutional and organisational barriers, (b) financial barriers and (c) educational barriers.

In order to get a better management of these barriers, we present a model of the entrepreneurial ecosystem, including a flow diagram aimed to allow the entrepreneurs a better understanding of the process they have to face when developing an entrepreneurial initiative, by considering the specificities of the CEIs.

The outline of the conceptual proposal to stimulate CEIs is shown in the image below (Fig. 3). This outline presents the determinant factors for entrepreneurship (individual, social, and macroeconomic factors), including the barriers (financial, institutional, organizational, educational) identified by the OECD/EUROSTAT (2008) that can interfere in the system, and it relates them with the individual process of business creation.

Insert Figure 3. Outline to stimulate CEIs.

From this approach, we will mention factors that affect to all new initiatives and specific factors that involve CIEs.

General Factors: All the elements of the entrepreneurial ecosystem are related and evolve throughout time. The relations between investors and financing tools explain the different level of the financial

barriers for entrepreneurs in a country. The relations between the support institutions and other entrepreneurs condition the institutional and organizational barriers of the entrepreneurial ecosystem. Finally, the outcomes of these relations in the form of investors´ coaching, commitments with financial institutions, networking with other entrepreneurs or intellectual capital transfer from universities determine the educational barriers.

Factors affecting CIEs: Analysis conducted about the evolution of public policy in in creative industries shows a trend towards a reduction of public and private support including grants, cross subsidies, tax treatment and international projection (Bustamante, 2013), and a new trend of innovation has been detected as the improvement of creative organizations' channels of communication with stakeholders and society, as volunteer-based solutions and money donations (e.g. crowdfunding, micro-patronage, online fundraising). From this approach, a CEI that is considered in isolation does not have any chance of surviving in an interrelated environment.

The existence of investors such as Business Angels and risk capital funds can provide to CEI not only monetary capital, but also experience (Rodeiro et al. 2011). This is a really valuable contribution in the shape of intellectual capital for the CIE.

From this approach, the support of academic institutions through the network thinking allows the entrepreneurs to reach several resources better than competitors: access to university specialist; use of laboratories and incubators and contact with the business demand of agents close to entrepreneurial initiatives. All this will allow overcoming somehow the institutional and educational barriers previously detected (Rodeiro et al. 2008).

The following causal loop (Fig. 4) shows a potential dynamic of growth for CIEs. An increase of CIE´s initial resources (monetary, intellectual capital, expertise) rises the value of the CIE´s business design, increasing the viability of the CIE in the market through the time (the initial resources coming from investors, creditors and university support can be translated in internal resources of the CIE as human, structural or relational capital). According to the reinvestment policy of the CIE, part of these resources will remain in the organization, increasing the initial resources of the CIE, while other part of resources will be transferred to the stakeholders. Although in the short term this distribution reduces the amount

of resources for CIE, as stakeholders will become investors, creditors or clients of CIEs, in both cases the resources will increase the CIE´s resources in the long term, maintaining the growth loop in the future from a systemic approach.

Insert Figure 4. Growth dynamic of CIEs

Figure 5 shows the proposed flow diagram for the strategic planning of CEIs, following the previous conceptual framework. Roadmaps explores the interrelationship between structure and behavior of dynamic models (Forrester, 1992), and the roadmapping process can support the planning of tasks through the time line, identifying and assessing possible threats and opportunities in the business environment (Phaal et al., 2004). Following the approach of Phaal (2015), we have built a flow diagram of the interrelations of the different layers through the time. This tool lets to use some of the layers of the roadmap from a dynamic approach.

Insert Figure 5. Flow diagram of strategic planning for CEIs.

Through this flow diagram entrepreneurs can perceive the influence of their decisions in the environmental commitments (investors, creditors, university support), the flow of resources that supports the value of the business plan and the decision process that manages the transference of the resources through the business design towards the stakeholders, conditioning the viability of CIE to survive and grow through the time line. This design lets us to illustrate how the CIE can link the strategic goals with the decisions involved in the transfer of resources (Phaal et al., 2004).

The environmental commitments can provide initial resources for creativity and innovation. If creative entrepreneurs can get favorable agreements with investors, creditors and support institutions, the CIEs will be able to accumulate a higher stock of resources to be invested in a business design with more value in the market. Finally, the decisions involved in the transfer of resources (human capital, structural

capital, relational capital) will determine the current and future viability of the CIE. This roadmap lets successive iterations following the previous causal dynamic of growth (Fig. 4). Thus, in year 3, the transfer of resources through reinvestment (direct transfer) or through the stakeholders´ behaviour (indirect transfer) will activate the flow of initial resources of the CIE, in a recursive structure.

This implies a business model characterized by co-dependent dynamics and competitive cooperation strategies. The model can be harnessed to support existing product introductions or managed to preserve competitive standing against existing rivals (Dyerson and Pilkington 2005). As a consequence of the aforementioned, during the incubation process, the territorial and sectorial concentration possibilities of the creative activities are increased.

5. Results

5.1.Differences between CEIs and non-CEIs

As a consequence of the previous analysis of the theoretical framework, it can be asserted that CEIs differ from those that are not creative in a series of factors related to human capital, structural capital, the type of products generated, and the location of its core business in a specific segment of the creative value chain (Table 2). This Table let us support the first proposal *(P1): There are substantial differences between CEIs and non-CEIs, regarding to human capital factors, structural capital factors, intellectual property and creative value chain.*

Insert Table 2. Indicators of differentiation of CEIs.

5.2.Mapping of potential CEIs in eight regions in the Southwest of Europe

The information obtained from the survey to 439 companies and 442 research groups of eight regions of Spain, France, and Portugal have let us obtain data of the innovation demand of companies and innovation supply of research groups. Although this sample is not enough to do an extrapolation to the

general population of these countries, from the approach of this analysis it is a starting point to study CEIs barriers and weaknesses of the model of creative entrepreneurship in these countries.

Regarding companies demand, 184 out of the 439 companies surveyed agreed in the necessity of incorporating innovative services with creative nature. The distribution of this demand showed that the activities related to industrial design on the one side (43%), and software and computer services (37.3%) on the other hand, were the most demanded (Fig. 6).

Insert Figure 6. Distribution of the demand of creative innovative services.

Regarding the distribution among the participant countries, Spanish companies mostly demand technological products, followed by those related to industrial design. French companies focus their demand of creative innovations on the fields of industrial design and software. Finally, Portuguese organizations demand industrial design, advertising, and media services.

With regard to research, the data show a distribution of the supply of creative innovative services focused on software development (68%) and industrial design solutions (32%) (Fig. 7).

Insert Figure 7. Distribution of the supply of creative innovative services.

Regarding the distribution among the countries that took part in the study, the Spanish research supply is distributed between software development (60%) and industrial design solutions (40%); while the research carried out in the French and Portuguese regions involved shows a higher focus on the development of industrial design solutions (97% in France and 98% in Portugal).

Nevertheless, only 68.5% of the surveyed research groups are willing to collaborate with companies in developing and commercializing innovative creative solutions. In addition to the previous information,

only 7.8% out of the 153 creative research groups considered have developed start-up projects (spin-offs), even though they already have 163 patents registered.

Considering these data, it is clear that there is a need for developing new models of transfer of the research outputs to the market, from a critical analysis of the institutional, organisational, financial, and educational barriers that are making the development of many CEIs difficult.

5.3.Analysis of barriers for the CEIs creation

According to the flow diagram, the key issue to increase the value of a CIE is related with getting favourable environmental commitments. In this section we advance in the identification of the barriers for the creation of environmental commitments, grouping them in institutional and organisational barriers, financial barriers, and educational barriers.

Institutional and organizational barriers

The poor integration between support infrastructures for business start-up and the creative activity of the universities constitutes a basic organizational limitation, since it does not facilitate the continuity of the stage of business idea generation with the detection of the market needs in the sample analysed (Rodeiro et al. 2008, 2011). The fluency of this process and the integration of infrastructures with human assets could improve the development of many creative ideas through new enterprise projects. For that reason, the institutional and organisational limitations often prevent the creative companies from feeding from expert innovations coming from the research organisms, and from being able to fill a real need of the market.

Financial barriers

Previous literature have found out that the reason why most of the entrepreneurial initiatives do not achieve a high growth is that they have difficulties to obtain external financing in order to exploit the business opportunities detected. This makes the access to capital as one of the most important barriers an entrepreneur has to face (Evans and Leighton 1989). This gap between the demand of financial resources by entrepreneurs and the availability of capital on the part of the investors has been detected in the USA (Shane 2004), the United Kingdom (Bank of England 2003), and Europe (European

Commission 2002); and this has had a direct impact on the companies' capability of carrying out their development (Brown et al. 2004).

The main financing source of the CEIs is self-financing, while public aids, bank loans, and private aids have a more residual nature (Utrecht School of the Arts 2010). For this reason, one of the greatest obstacles the CEIs entrepreneurs have to face is finding the necessary funds for their projects. In this sense, the access to financing sources plays an important role during all of the stages of the entrepreneurial initiative lifespan, but it is paramount in the initial stage (GEM 2011).

Being aware and informed about the kind of aids available is fundamental for the companies, especially in their earlier stages. Nevertheless, creative entrepreneurs do not generally have access to many financing sources, mainly due to their unawareness regarding funds that are not specifically aimed to CEIs (KEA 2010).

Universities point out the access to venture capital as the most relevant factor when creating successful entrepreneurial initiatives, and the companies also consider it as one of the most useful source in the earlier stages of their existence (Wright et al. 2006). Furthermore, it is important to take into account that the development of bonds between venture capital entities and universities is also beneficial for these investors, since a flow of investment opportunities in these companies can be created (Wright et al. 2006). However, the information imbalances between entrepreneurs and investors are one of the main problems detected for the companies arisen from universities to have more difficulties to access the venture capital.

Educational barriers

The entrepreneur's lack of management skills detected in the analysis can have direct consequences, such as a bad coordination of the team work; the lack of fulfilment of the periods stipulated in the business plan; scarce market orientation of the technologies and products created; small contact networks, or poor business management. All these aspects can make many CEIs not to grow in the future. The failure of these companies is most of the times due to problems with the management team, and not with the business opportunity. Furthermore, investors prefer founders with management and

business experience in order to exploit the business opportunities related to new technologies, by choosing preferably founders who know the clients' needs.

To wrap up, the main barriers detected for creating creative entrepreneurial initiatives (CEIs) are shown below in a synthetic way (Table 3).

Insert Table 3. Barriers for CEI creation.

This Table let us support the first proposal *(P2): There are institutional, financial and educational barriers that limits the creation of CEIs in South Europe (Portugal, France, Spain).*

5.4.Application of the flow diagram to a case study

We used a single holistic case study design, adapted from Villarreal and Landeta (2010), in order to support the third proposition *(P3): The adaptation of organizational measures of stimulus to the specificity of CEIs through a flow diagram can reduce the limiting effect of the barriers detected by CEIs*. .

The Mans Business Initiative Centre is a commitment for business entrepreneurship in Galicia (Spain) supported by local (IGAPE), European (ERDF) public institutions, and private organizations, with the aim of promoting and supporting business projects, considering TICs and media industries as priorities. The strategy of Mans is directed to stimulate synergies and vertical and horizontal integration among entrepreneurs, and a view beyond the demand of financial return in the short-term. MANS created 427 jobs in the incubator from 2004 to2012.

The industry distribution of the companies (CEIs) located in the incubator (Fig. 8) show a favourable environment for networking since 2004. Here, different kind of entrepreneurial initiatives coexist, such as multimedia, new technologies, edition, and industrial design, together with other initiatives specialized in advisory services.

Insert Figure 8. Industry distribution of CEIs in Mans.

The incubator's management team, which knows the entrepreneurs' day-to-day requirements, often prevent them from starting collaboration actions with their neighbours, takes care of organizing periodical events where the new entrepreneurs located in the incubator describe their activity and strategy lines to the rest of the companies. Likewise, some other actions are promoted from the incubator, such as visits of potential investors, contests and awards directed to attract the business talent to sectors that are considered strategic by the managers..

From the survey conducted to entrepreneurs located in the Mans Business Initiative Centre during 2012, the results below have been drawn:

-The entrepreneurs clearly differentiate this incubator from others due to the quality and extent of its facilities, as well as to the proximity to the business and university environment, and the involvement of public and private institutions, not only as incubator support, but also as potential investors.

-The requirement of having a Business Plan as a criterion for the admission in the incubator is considered by the entrepreneurs as a guarantee of the reliability and commitment of the initiatives.

-The effort made by the incubator's management team when it came to organize meetings for introduction and communication of initiatives among the entrepreneurs is positively valued.

-The relationship between the quality of the facilities and the rental price for its use is considered quite competitive, in such a way that all the entrepreneurs surveyed confirmed their will of staying in the incubator in the future, even after the three-year period when they are considered entrepreneurial activity and are financially supported.

According to the data gathering, the CEIs located in Mans-Paideia follows the flow diagram that has been proposed in Figure 5, because the incubator process of all CEIs is the result of previous environmental commitments (investors of Mans participates as shareholders of some CEIs and the agreement of use of the Mans´facilites provides the necessary support for agreements with other stakeholders) and the evaluation of the design of the business plan is a requirement for the admission in the incubator, because it conditions the viability of the CIE.

The analysis carried out, as well as the results obtained from the survey to entrepreneurs, allow considering Mans Business Initiative Centre as a good practice of stimulus for CIEs, according to the conceptual framework of Figure 3.

-The incubator contributes to create an Entrepreneurial Ecosystem, where public initiatives coexist with private and entrepreneurs coming from creative sectors such as audiovisual, technological development, digital edition, or communication. It reduces the institutional barriers previously detected. It also reduces the educational barriers.

-The incubator management stimulates the Network thinking by promoting activities for the entrepreneurs to meet and pool with the aim of favouring face-to-face and virtual networking; the knowledge of CEIs by potential investors (Business Angels), or agreements with support institutions (universities) that are capable of providing the CEIs intellectual capital and innovation, as well as contributing to their internationalization.

-The development of a business plan design as the requirement planned as criterion for admission is a solid starting point of the Entrepreneurial Process; which contributes to mature the CEI's business idea with market criteria, as well as its viability analysis and its incubation process in the incubator. It also reduces the financial barriers.

-Finally, the will the entrepreneurial initiatives have for staying, which are already considered consolidated companies, lays the foundations of a recursive structure between new CEIs and successful experiences, continuing the process of entrepreneurial support. It also reduces the educational and organizational barriers.

As conclusion, the Mans Business Initiative Centre represents a model that allows overcoming many of the barriers detected (Table 4), through a new way of supporting CEIs.

Insert Table 4. Mans Model and barriers to entrepreneurship.

This case study supports the third proposition *(P3): The adaptation of organizational measures of stimulus to the specificity of CEIs through a flow diagram can reduce the limiting effect of the barriers detected by CEIs.*

6. Conclusions and future research

This report is a systemic approach to the reality of CEIs in the Southwest European Space (SUDOE). The analysis of the existing barriers to CEI creation has allowed identifying a series of institutional, financial, and educational factors, which condition the environmental commitments to get initial resources for the CEI. In this sense, a greater connection between the institutional measures for entrepreneurial support and the university creative activity is needed, as well as a greater stimulus for investors and financial institutions to allow starting activities with a great growth potential. All this must be carried out without forgetting that it is important to have specific training in order to reduce the lack of management skills of the creative entrepreneurs.

We propose a flow diagram which gathers the most relevant aspects a creative entrepreneur must take into account when developing their project. The process described relates environmental aspects (entrepreneurial ecosystem), the strategic value of the CEI (business plan design), and organizational procedure (incubation process) from a global and dynamic approach that takes into account the factors determining the success of the entrepreneurial initiatives previously studied in the literature.

The confrontation of the model to the case study of Mans Business Initiative Centre offers an empirical application of the proposed model.

Due to the complexity of the analysis, there are still limitations in order to test the implications of the planning of tasks following the flow diagram. Future research should extend the use of this model of strategic planning and test new case studies in order to go into each part of the model framework, analysing the effects of different environmental commitments and business plan designs in the incubator process of CEIs and their future growth.

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Fig. 1. Study models of the creative industries

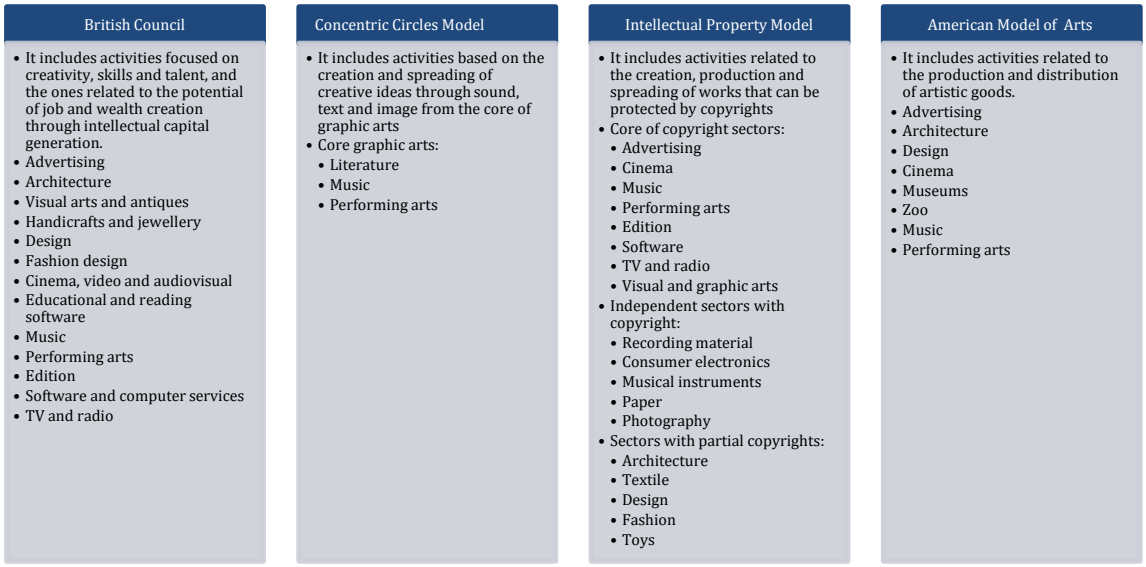


Fig 2. Data compilation structure

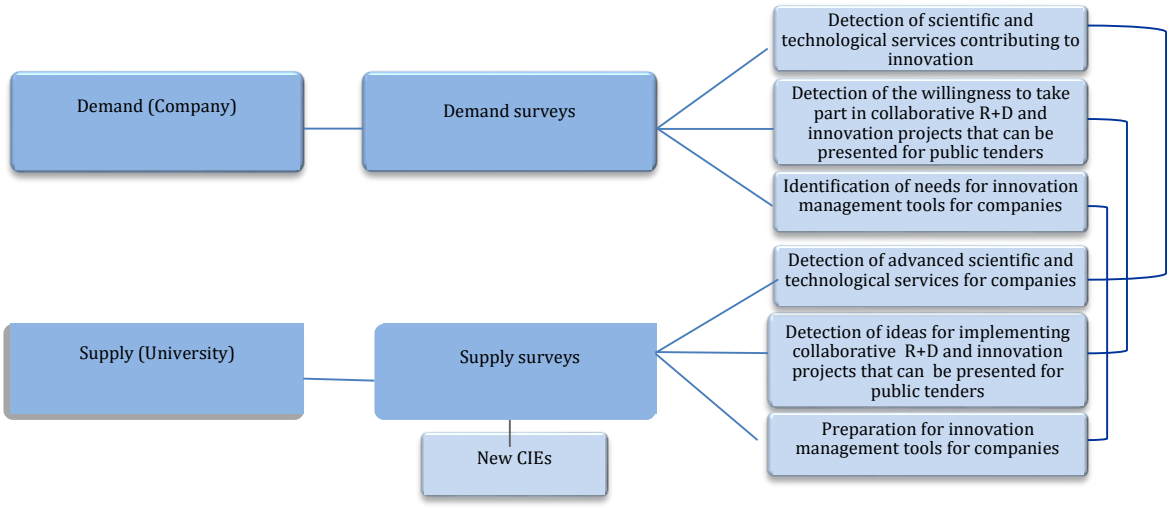


Figure 3

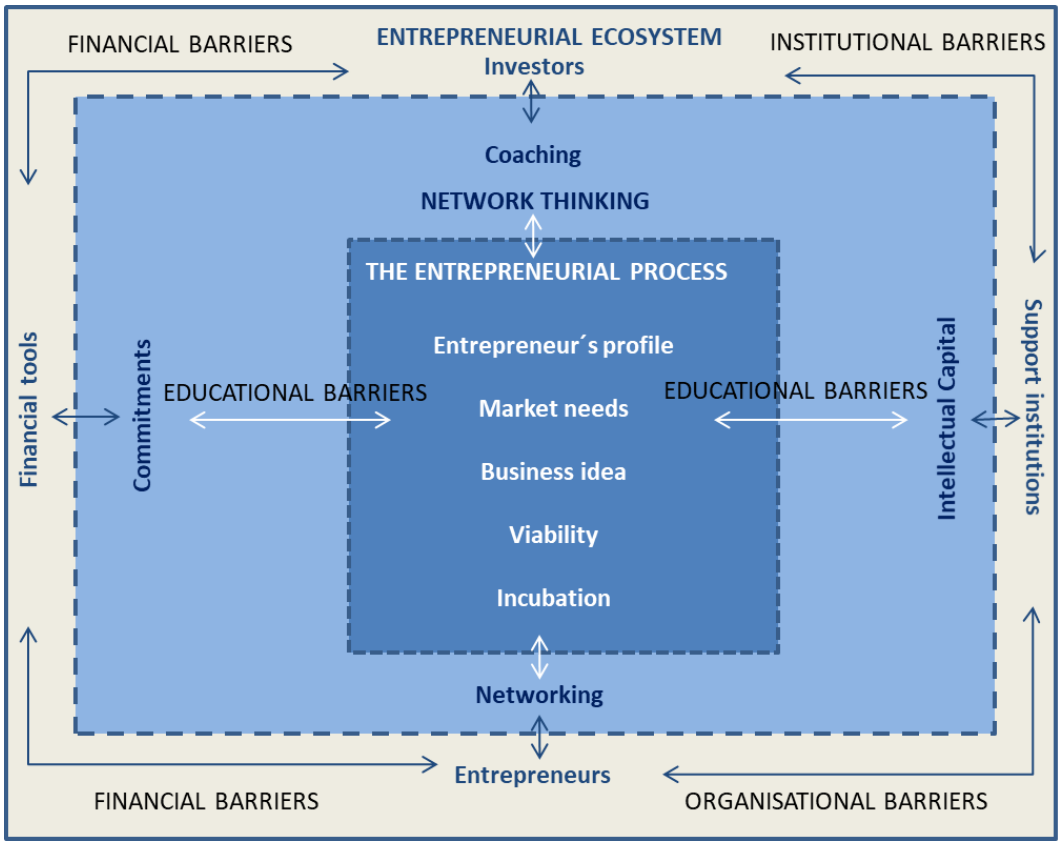

FINANCIAL BARRIERS
ENTREPRENEURIAL ECOSYSTEM
Investors
INSTITUTIONAL BARRIERS
Coaching
NETWORK THINKING
THE ENTREPRENEURIAL PROCESS
Entrepreneur´s profile
Financial tools
Commitments
EDUCATIONAL BARRIERS
Market needs
EDUCATIONAL BARRIERS
Intellectual Capital
Support institutions
Business idea
Viability
Incubation
Networking
Entrepreneurs
FINANCIAL BARRIERS
ORGANISATIONAL BARRIERS

Figure 4

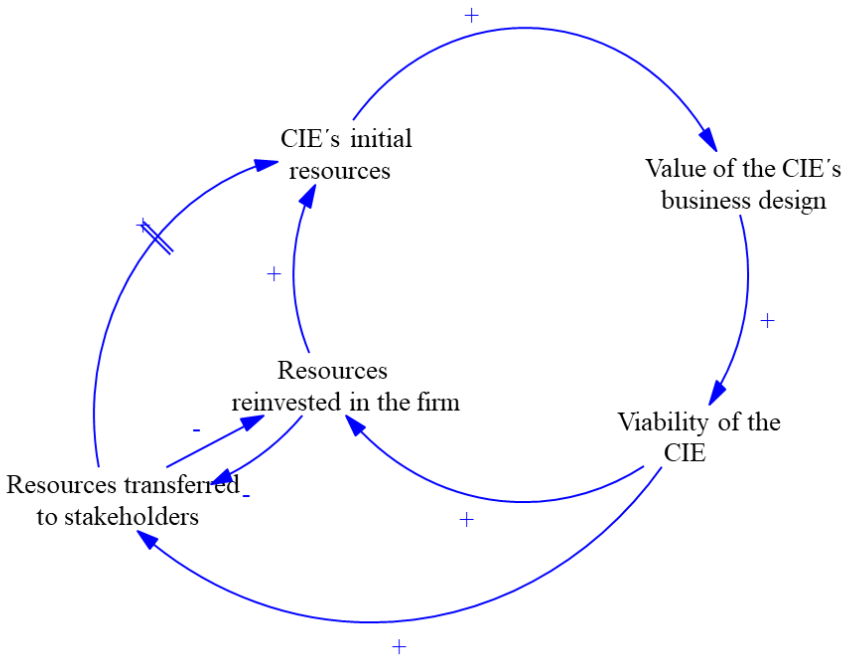
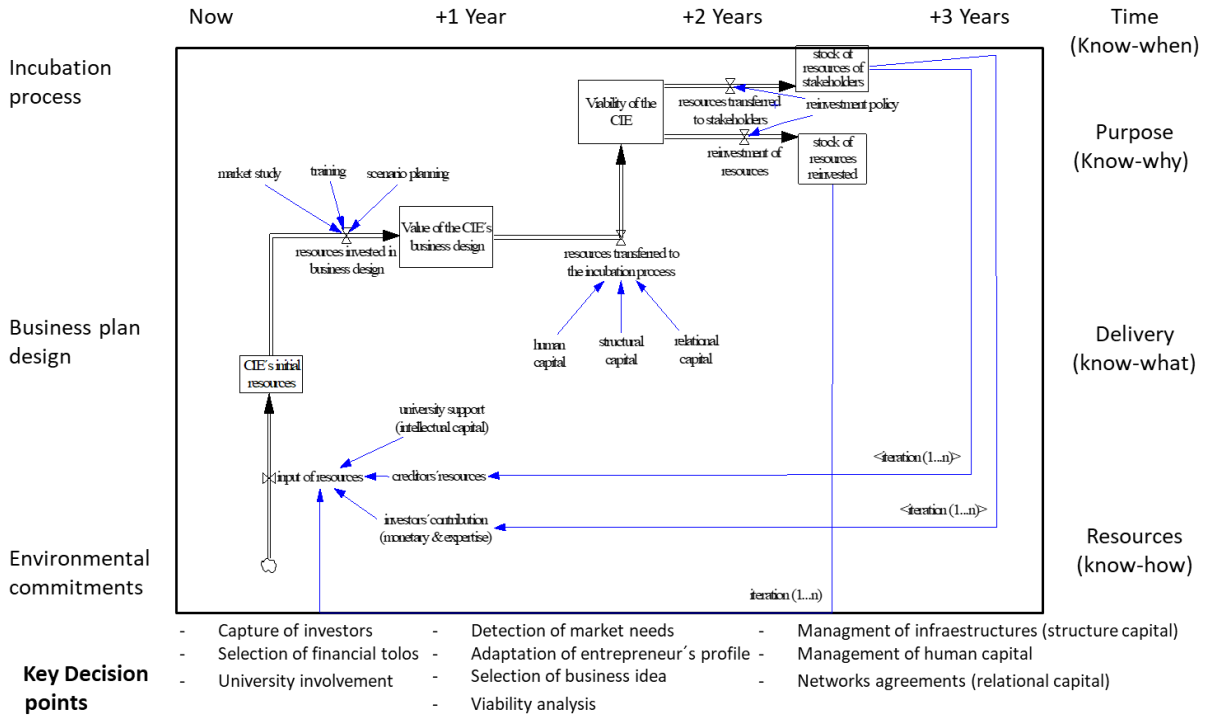

CIE´s initial resources
Value of the CIE´s business design
Resources reinvested in the firm
Viability of the CIE
Resources transferred to stakeholders
+
+
+
+
+
-
-

Figure 5



Key Decision points

- Capture of investors
- Selection of financial tolos
- University involvement
- Detection of market needs
- Adaptation of entrepreneur´s profile
- Selection of business idea
- Viability analysis
- Managment of infraestructures (structure capital)
- Management of human capital
- Networks agreements (relational capital)

Fig. 6. Distribution of the demand of creative innovative services

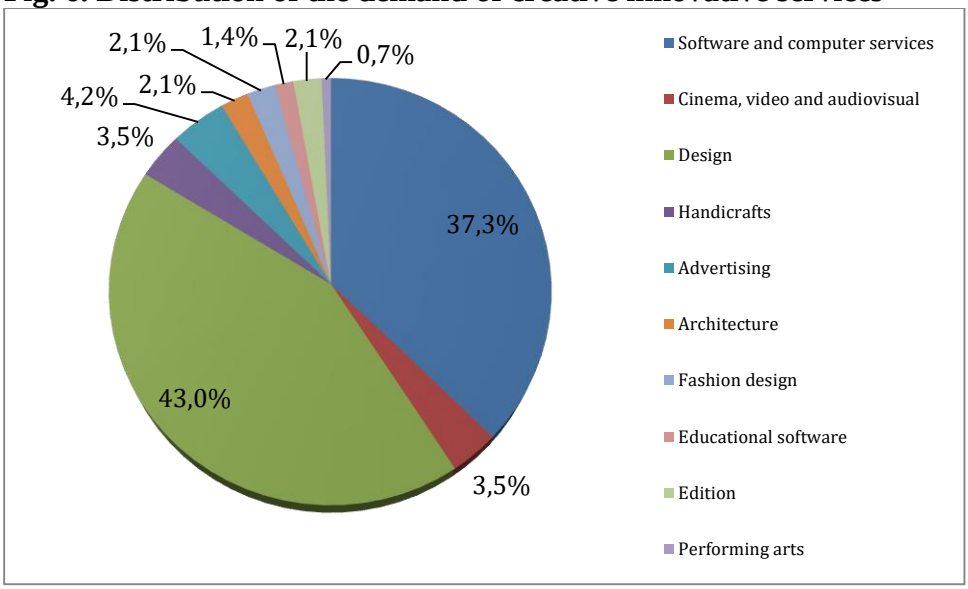


Figure 7. Distribution of the supply of creative innovative services