HAL
open science

A Dialogical Approach to increase " Matching " Efficiency before Collaborative Business Model Processes

Jérémie Faham, Maxime Daniel, Benjamin Tyl, Iban Lizarralde, Iñaki Garagorri, Jérémy Legardeur

To cite this version:

Jérémie Faham, Maxime Daniel, Benjamin Tyl, Iban Lizarralde, Iñaki Garagorri, et al.. A Dialogical Approach to increase " Matching " Efficiency before Collaborative Business Model Processes. XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Jun 2016, Porto, Portugal. hal-01332579

HAL Id: hal-01332579

https://hal.science/hal-01332579v1

Submitted on 16 Jun 2016

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

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

This paper was presented at The XXVII ISPIM Innovation Conference – Blending Tomorrow's Innovation Vintage, Porto, Portugal on 19-22 June 2016. The publication is available to ISPIM members at www.ispim.org.

A Dialogical Approach to increase "Matching" Efficiency before Collaborative Business Processes

Jérémie Faham*

Estia Recherche, Technopôle Izarbel, 92 Allée Théodore Monod, 64210, Bidart, France.
E-mail: j.faham@estia.fr

Maxime Daniel

Estia Recherche, Technopôle Izarbel, 92 Allée Théodore Monod, 64210, Bidart, France.
E-mail: m.daniel@estia.fr

Benjamin Tyl

APESA Innovation, Technopole Izarbel, 64210, Bidart, France.
E-mail benjamin.tyl@apesa.fr

Iban Lizarralde

Estia Recherche, Technopôle Izarbel, 92 Allée Théodore Monod, 64210, Bidart, France.
E-mail: i.lizarralde@estia.fr

Iñaki Garagorri

Universidad de Deusto, San Sebastian, Spain
E-mail : igaragorri@opendeusto.es

Jérémy Legardeur

Estia Recherche, Technopôle Izarbel, 92 Allée Théodore Monod, 64210, Bidart, France.
E-mail: j.legardeur@estia.fr

* Corresponding author

Abstract: The 2014-2020 European Union cohesion policy settled the obligation to establish "Research and Innovation Strategies for the Smart Specialization" (RIS3) to build competitive advantages for each region. The originality of RIS3 is the "bottom-up" identification of regional priorities through the "Entrepreneurial Discovery" (ED) process which stresses the need to involve all the regional "entrepreneurs" (RE) - companies, research, consulting, public authorities etc. - into the design of territorial orientations. However there is a lack of recommendations to implement it into

heterogeneous regions. The Collaborative Business Models (CBM) approach has probably a role to play within this process as a suitable strategic tool to set up regional "value networks". However, the preparatory stage of CBM and especially the identification and the matching processes among potential RE partners is often not addressed. This work is a proposition to answer this issue of matching in order to improve the CBM efficacy within RIS3.

Keywords: Matching; Collaborative Business Models; Profile Comprehension; Regional Entrepreneurs; Dialogical questionnaire; Entrepreneurial Discovery; RIS3; Innovation; Collaborative Platform; Smart Interface

1 Introduction: Research and regional Innovation Strategies for the Smart Specialisation

Within the actual context, characterized by economic, environmental and societal challenges, the stimulation of the creativity and the support to innovation are central issues for the competitiveness of enterprises. This topic is a crucial interest for the European Union Commission which is enhancing a smart, sustainable and inclusive growth to answer the actual socioeconomic crisis and the societal grand challenges of the modern society. A big attention is paid to the investment in research, innovation and entrepreneurship within each European regions which must establish now "Research and regional Innovation Strategies for the Smart Specialization" – RIS3. This concept, introduced in 2009 by D. Foray (Foray et al., 2009) is based on an effort of analyse and a work of regional introspection in order to identify structural distinguishing regional characteristics. The objective is to select and prioritize few specific areas of excellence in order to make appear an original competitive advantage for each European territory. The main novelty of those territorial strategic programs is that they are one of the pillars of the 2014-2020 European Union Cohesion Policy and the implementation of RIS3 is a prerequisite to receive European Regional Development Fund (ERDF) to support regional investments during this period. The purpose is to insure a better resources allocation and to avoid the duplication of regional strategies of development at European level. The main concern is to replace the "innovation" as a priority into European regions. The attempt is to build a vision collectively shared by all the regional "entrepreneurs" (RE) regarding the future orientations of their region.

One of the main specificities of RIS3 is to emphasize on the necessity to lead the identification and the prioritization to push at regional level as a "bottom-up" process through a mechanism called the "Entrepreneurial Discovery" (ED) process. The purpose of the ED process (Foray et al., 2011) is to stimulate the proactive and the collective participation of the broader set of regional « entrepreneurs » of the territory (enterprises, universities and research institutes, supporting and consulting organizations, institutional authorities etc.) in the definition of the orientations of their region. Each model which wouldn't include this specific aspect of the ED process would be totally different than the RIS3 (Asheim et al., 2011); (Boschma, 2014).

Despite the unanimity around the promising purposes of RIS3, an increasing number of critics emerged to raise regarding the generality, the opacity and the fuzziness which remains to concretely implement this « academic » concept in very different regional contexts and heterogeneous innovation systems (McCann and Ortega-Argilés, 2013); (Navarro et al., 2014); (Navarro et al., 2011). Another uncertainty raised around the dangers that such an encompassing policy (Stahlecker, T., 2010) designed in a « one size

fits all » fashion (Tödtling and Trippl, 2005) could produce in desiring to go too far, too fast (Kroll et al., 2014).

In this way, even if the RIS3 proposals at least replaces a participative and inclusive innovation strategy as a pillar of politic agendas, one limiting comment often emerges regarding the operational part of those strategies: the absence of concrete propositions or methodologies in order to implement the ED process within very highly heterogeneous regional contexts. However, the actual complexity of the territorial network of socioeconomic actors commands to draft a methodology to analyse, comprehend and release the innovative potential of innovation of all RE.

This methodological limitation involves the risk of only perceiving the RIS3 as the last « fashionable » concept imposed by the European Commission as the prerequisite to obtain European funds. The main concerns is that regional authorities in charge of the development of such territorial strategies comprehend the RIS3 as a unique and one-shot exercise (Baier et al., 2013) involving no reflection and no questioning about the long term orientations of the region. The danger is to underestimate the real innovation potential of the whole set of RE evolving in the territory considered. An additional risk is to reproduce or to exacerbate certain bias already present within regional innovation systems. Indeed, we noticed that very often only the usual actors i.e. the regional "leaders" (big companies, high-tech start-up, big laboratories etc.) or other main stakeholders already well identified and fully involved within the decisional machinery of regions had been solicited during the launch of RIS3. At the same time, all the other smaller actors (SMEs, individuals, laypersons etc.) which constitute however the big majority of RE are still rarely taken into consideration. Those smaller RE sometimes even consider themselves as ineligible or illegitimate to deal with "Innovation" and often feel unable to proactively contribute to the definition of the economic orientations of their regions.

Therefore, one of the major challenge for the RIS3 is to instrument the ED process in order to open it to a broader set of RE. There is a need to find new mechanisms to foster the collaboration between all regional stakeholders in order to facilitate a more inclusive involvement of smaller or unexpected RE into this promising "bottom-up" process of regional prioritization.

This paper is structured as follow: The section 2 presents two approaches to help regional "entrepreneurs" (RE) to face those new challenges. In section 3 we highlight the necessity to focus on the enhancement of the "matching" potential between RE in order to increase the CBM efficiency. We present then in section 4 our propositions to get a more comprehensive characterization of RE profiles in order to support their potential of collaboration. We draw in section 5 few possible statements opening the discussion on the future implications of this work and some perspectives toward visual representations of RE profiles to support their potential of "Matching". Finally, we propose a conclusion of this work in section 6.

2 How to support the participation of all RE within the RIS3?

In this section we present two different but complementary proposals that we adopted in order to improve the effective and the collective participation of SMEs or other smaller RE within the ED process of RIS3.

2.1 WeKeyInnovation: a collaborative platform to support innovation at regional level

As a transversal pillar of our proposal, we developed the "WeKeyInnovation" (WKI) which is an open and collaborative platform based on the crowdsourcing approach (Howe, 2006) to share information about existing innovation supports and stimulate the identification of all the RE. WKI is accessible online and it will be progressively enriched by all RE interested by the measures and processes available to support creativity, entrepreneurship and innovation. This collaborative regional platform brings the possibility to ask and answer questions, to lists the events and the set of RE dedicated to innovative concerns into a regional directory.

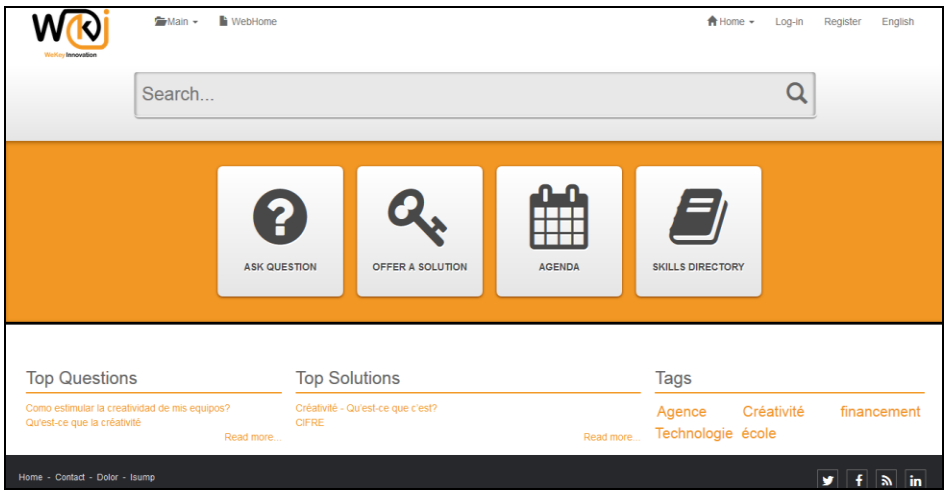

Figure 1 The four main actions of WeKeyInnovation

It is designed according to two main objectives:

- The first is to give an online access to information related to existing methods, tools, software, funding, consulting… that can be used by companies to manage and support their creativity and innovation processes.
- The second objective is to provide to the regional authorities a dynamic observatory to allow some specific statistics and previously unseen elicitations concerning the practices, the needs, the levers and the barriers of companies when facing alone, in collaboration or within networks the challenges of innovation in order to better orientate the strategic territorial policies like the RIS3.

However this knowledge sharing strategy supports a wider framework directed to the stimulation of collaborative innovation dynamics of RE. We analyse in the next section how the Collaborative Business Models (CBM) processes (Konnertz et al., 2011) could be used as a complementary approach to enhance the collaborative potential of RE and support the design of innovative co-propositions leaded by RE at the territorial level.

2.2. The collaborative business model: a complementary approach to support the inclusive and collective participation of RE within the RIS3

In order to favour the « action in network » of RE in the design of innovative propositions for their territories, we analysed the possibility to instrument the ED process building on the principles of the "Business Models" (BM) approach as. The reference to BM seems peculiarly appropriate to comprehend the stimulation of creativity, competitiveness and innovation processes, because those approaches were conceived to tackle the "value-creation", "value-capture" and "value-distribution" mechanisms by companies (Osterwalder et al., 2005). We decided to address our problematic of the improvement of the ED process within RIS3 though the BM prism because this strategic tool at the interface of the multiple challenges of "innovation" (Van Vliet, 2014) can make it possible for all RE to construct innovative propositions within their respective territories. In fact, the BM approach offers a solid and suitable framework to systematically imagine and structurally describe the added-value of products and services offered by a company to its customers. The BM concept is also a powerful filter to perceive, represent and understand the existing connections between the different keys resources which are necessary to create a new value-proposition, to develop and exploit it (Boons et al., 2013). The statement that the real source of innovation is not resulting anymore from the products and services created by the enterprises but rather relying on the innovativeness of their BM is well acknowledged (Johnson et al., 2008). The BM refers to the strategic positioning of organizations and it allows at the same time to grasp the value-capture and the value-distribution logics of this new value created. Those assumptions introduce BM as a robust approach to perceive, comprehend and finally control the risks entailed by RE which develop new value-propositions in the uncertain actual socioeconomic environment.

But the volatile economic characteristics of our modern societies command to the organizations to permanently rethink their BM in order to innovate constantly and keep competitive on the long term. This complexity and the increasing scope of challenges to answer in uncertain environments often requires for small RE to launch more collaborative dynamics of work in order to gather resources and combine complementary assets. However, this recent structuration in networks implies the design of new frameworks, new sharing platforms and new working methods (Eppler et al., 2011). We assume that the Collaborative Business Model (CBM) approach has a leading role to play into those promising dynamics as a suitable strategic discussion framework to set up "value networks" (Breuer and Lüdeke-Freund, 2014) and to focus the discussion on potential orientations for regional business specialization. Hence, in our vision we take on Rohrbeck definition (Rohrbeck et al., 2013) who describes the collaborative business modelling as :

"An activity where multiple organizations that might differ in type (industry, public research and non-profit), their position in the value chain (manufacturing, service, etc.) and industry (energy, ICT, etc.) work together to create a value creation system. In some cases, they will also attempt jointly to create the value capture system".

A strong dynamic had been launched in this emerging research area and an increasing number of tools (Bocken et al., 2015); (Joyce and Pigneur, 2015) and methodologies (Dara, 2013) opened a promising avenue in this field.

However, the literature doesn't address the question of the preparatory stage of CBM processes and neglected the potential to gather the right collaborators before to start any CBM processes. Indeed, it is difficult to find mechanisms to help RE to identify the appropriate partners to achieve a successful collaboration. Thus, the next section focuses on the need to improve the "Matching" efficiency between RE as a necessary pre-step of CBM processes.

3 Enhancing the Matching Potential of RE to Increasing the CBM Efficiency

To get a more comprehensive knowledge about the different aspects of each unique RE profile and regarding to their respective expectations is a critical issue to improve their "matching" potential before they could start any CBM process.

1.1 A More Comprehensive Profile Characterization of RE to Enhance their "Matching" Potential

Our main assumption is that achieving a better characterization of RE profiles before their participation to any networking or collaborative event increases the probability of matching and their chances of succeed in their potential collaboration. It is essential to enhance their mutual understanding during this preparatory phase of CBM processes. The necessity to reach a more comprehensive knowledge about each RE profile and their true needs when they meet during specific events is a strategic concern:

- for organizers of networking events (business meeting, seminar, workshop, conference…) to better prepare their meeting with a more efficient consortium of participants;
- for RE participants which can better explicit and specify their true needs concerning the event. They can also decide to attend or not to the different events proposed and "filter", identify and match easier with more appropriate profiles of potential partners.

Indeed, we will face a plurality of RE profiles attending to the same event depending on:

- each RE individual socio-demographic characteristics (age, gender, education etc.), personality traits (need for achievement, risk predisposition etc.), values orientation (continuity, openness to change, self-enhancement) (Schwartz, 1992); (Cieciuch et al., 2014);
- and according to its affiliated organization features (size, sector, structure etc.), its organizational culture (hierarchical, results-oriented, group-oriented etc.) (O'Reilly et al., 1991); (Borg et al., 2011), its environmental confines (stability, uncertainty, hostility...), the hierarchical structure of its motivations or success criteria and its instantaneous strategic expectations in a specific context or regarding to the topic of one meeting (Jayawarna et al., 2013); (Gorgievski et al., 2011); (Stefanovic et al., 2010).

But the literature on this characterisation of entrepreneur's profiles is, however, deficient in several respects.

First, Previous works have been considered only unidirectional influencing factors that led to an increasing number of entrepreneurs' typologies or taxonomies (Zahra et al., 2009); (Miner, 1997); (Filley and Aldag, 1978); (Miles et al., 1978); (Laufer, 1975) which were strongly criticized because they were inappropriate to grasp entirely such a complex and multidimensional phenomenon (Gartner, 1985).

Second, much of these works were not or hardly contextualized. Consequently, the generality of these findings makes it impossible to shed light on the effective RE behaviors, especially for SMEs, who are often facing instantaneous or specific contexts in more precise environments. It gives in addition a little room to practitioners to support or bring suitable recommendations to RE dealing with operational decisions taking place within unique environmental configurations.

At the opposite, others studies focused only on a specific type of entrepreneur (Jaouen, 2008) either on a single organizational sector (Robert et al., 2009); (Mills and Pawson, 2011); (Fillis, 2010); or community (Dana, 1995), on a precise step in the business life course (Vega and Kidwell, 2007) or where directed to measure specific phenomenon (Vamvaka and Botsaris, 2014), which severely restricts the exploitation of the results to the marginal fraction of socioeconomic actors covered by each study.

Hence, this casts serious doubt on the idea which:

- In the first case, implicitly considers that RE behaviours remain similar independently of the context,
- Or which suggests in the second one that the patterns could be extended to all RE profiles, types of organizations, business sectors or stages of the entrepreneurial process.

Moreover, this set of heterogeneous entrepreneur's typologies and taxonomies led to the multiplication of contradictory results, classification or prescriptions which are impossible to compare (Rauch et al., 2009) and casting doubt on the existence of homogeneous entrepreneurs' profiles.

The limits are even stronger if we study this phenomenon through the perspective of RIS3 "entrepreneurs" i.e. the RE because it implies to consider a broader set of unusual socio-economic actors than in others entrepreneurship researches. We present in the next section a methodology proposition to support a more detailed characterization of RE profiles in order to facilitate their matching and enhance their potential of collaboration

4 Toward a More Comprehensive Characterization of RE Profile to Support their Potential of Collaboration

4.1 From usual entrepreneurs to the characterisation of RIS3' Regional "Entrepreneurs"

The characterization of ED is an increasing challenge because the two founding concepts of RIS3, the RE and the ED process broadens the scope of the fields and the range of socio-economic stakeholders to consider. RIS3 is open to all individuals and all types of organizations embedded in the society at regional level. In this context, studies which

focused on specific aspects of the entrepreneurial dynamics are too narrow to grasp the full dimensions of the heterogeneous set of RE potentially affected by the ED process of RIS3.

Based on others studies which encompassed the use of classifications and quantitative analysis (Jaouen and Lasch, 2015), our goal is to support RE during the process of identification-selection of potential partners. It requires to foster the matching efficiency which occurs between RE as a pre-step of any CBM attempt. The objective is only to bring them more information regarding to each RE characteristics and contextual expectations. Our purpose is to facilitate their mutual understanding in order to offer them an increased range of choices and possibilities of collaboration with unexpected regional actors. However, the challenges are multiple and it implies therefore to define which information to get, the adequate ways to collect it, and to choose the proper supports to use to make it accessible to all RE.

4.2 Embracing a Configurational and Multidimensional Approach to get a more comprehensive characterisation of RE profiles

We need to think in terms of crossed variables because the characteristics of RE profiles form unique combinations of interconnected dimensions. We embrace a configurational approach (Espíritu-Olmos and Sastre-Castillo, 2015); (Korunka et al., 2003); (Fayolle, 2007) to overcome the shortcomings of past studies that restricted their analysis to one dimension of the entrepreneur's profiles or to single precise aspects of entrepreneurship. The configurational approach enables to grasp much of the multiple areas interacting in the characterization of RE profiles. The definition of unique configurations of variables copes with the aim of this study because:

- It brings a more comprehensive understanding of the interrelated dimensions embedded into each unique RE profile and its specific expectations,
- It lets at the same time the possibility for further analysis of separated sets of different aspects (e.g. personality traits, organizational features, resources, environment etc.).

A strong literature review had been made to settle this configurational analysis of RE profiles. We selected the areas that correspond to the most often cited dimensions which influence their decisions and their behaviours:

- socio-demographic characteristics – e.g. age, gender, ethnicity, education, resources, position etc. - (Jayawarna et al., 2014)
- personality traits - e.g. need for achievement, locus of control, risk propensity etc. - (Cross and Travaglione, 2003),
- values orientation - e.g. continuity, openness to change, self-transcendence, self-enhancement etc. - (Schwartz, 1992)
- organization features - e.g. size, sector, structure etc. -
- organization culture - e.g. hierarchical, entrepreneurial, results or group-orientation etc. - (O'Reilly et al., 1991)

- environmental confines - e.g. stability, dynamism, uncertainty, hostility etc. - (Randerson et al., 2011)
- motivations or success criteria (Gorgievski et al., 2011)
- the instantaneous needs or contextual expectations (Jayawarna et al., 2013)
- or regarding to the precise topic of each meeting

We gathered in a previous work (Faham et al. 2016) the most complete set of items that have demonstrated constant significance in the relevant research or that were the most often cited in the literature review.

4.3 The Combination of Generic and Contextual Dimensions of RE profiles

We suggest to use both generic and contextualized information as an interesting alternative to get a more comprehensive understanding of each specific RE profile. Hence, all the items and RE profiles aspects that we gathered in the literature review were grouped into two distinct but complementary sets of "Generic" and "Contextual" dimension (Faham et al. 2016). The "generic dimensions" are RE characteristics which remain stable or that evolve very slowly in the long-term whereas the "contextual" ones (Table 1) are more inclined to change depending on each particular context (Sarasvathy, 2001).

To cope with this challenge, the "context-dependent" dimensions are listed as a set of possible dialogical (i.e. antagonistic but complementary) orientations (Morin, 2007). RE will have to answer few dialogical questions to precise their expectations regarding to those dialogical orientations before to participate to any specific event. It is precisely the arbitration between pertinent and rival values which is guiding their attitudes and their behaviors in different acts, at different moments and in different contexts (Schwartz, 2006). This consideration of each RE positioning can help them to clarify their oppositions but it also facilitates the identification of common or complementary interests.

The objective is to let a room for the dialogue between all RE regardless of having similar, contradictory or complementary profiles, generic values or specific expectations. This effort toward a better mutual understanding between RE makes it easier to match and start a collaboration with a broader set of potential unexpected partners.

Table 1 Dialogical questions and contextual dimensions of Regional Entrepreneurs' profiles participating to networking events

Contextual dimensions of RE profile			
	Strategy		
View of the future	**Prediction**	**Creation**	**(Sarasvathy, 2001)** (Silberzahn, 2014)
1. On this topic, do you need to carefully predict which are the future steps/objectives to follow before to take action or are you ready to create your destiny taking actions directly?			

Desired Strategic Process	**Global Vision**	**Local Action**	**(Avenier, 1997)**

2. On this subject, are you seeking to design a project with a global strategic vision or are you willing instead to engage in actions and start new initiatives at more local level?

Decision for action if	**Desirable**	**Possible**	(Bruyat, 1993)

3. On this thematic, are you looking for ambitious and desirable propositions or do you prefer to take action following more reasonable proposals which are already attainable regarding to your actual means?

Basis for Commitment	**Should**	**Can**	**(Sarasvathy, 2001)** (Silberzahn, 2014)

4. On those themes, do you think that you should get closer with "ideal" strategic/key partners to insure the good development of your projects or do you seek to commit with others actors which can already agree and get available to start new projects?

Outside firms - Interaction

Industry Experience	**Novice**	**Expertise**	**(Jaouen et Lasch, 2015)** **(Robert et al., 2009)** **(Korunka et al., 2003)**

5. On this topic, are you rather a beginner demanding for knowledge and solutions or do you consider that you are an experienced person with a recognized expertise in this field?

Decision drives	**Defend (Proposition)**	**Learn (Adhesion)**	**(Schwartz, 2006)** (Lawrence and Nohria, 2002)

6. On this subject, are you here to defend/submit a proposition of an identified idea/project/technology looking for people ready to commit with your project or are you rather seeking yourself new proposals of opportunities/projects to join with?

Decision for action	**Coherence**	**Contingency**	(Bruyat, 1993)

7. On this thematic, are you looking for "inputs" which will insure a strict coherence with your actual strategy or are you opened to more contingent and even unexpected opportunities?

Planning	**Commitment**	**Contingency**	(Sarasvathy, 2001) (Silberzahn, 2014)

8. On this theme, are you prone to limit your planning-path to those that support a commitment to existing and clearly defined goals or are you subject to commit with unexpected partners that open the scope of possibilities even if it might require strategy shifts?

Position Seeking	**Results**	**Relations**	**(Borg et al., 2011)**

9. On this event, are you looking for concrete propositions of projects with a focus on the need to reach results or do you expect to do some networking putting more emphasis on making new relations?

Decision Drives	**Acquire**	**Connect**	(Schwartz, 2006) (Lawrence and Nohria, 2002)

10. On this subject, are you seeking to control or acquire precise and identified resources or are you willing to connect with new people and build mutual-aid or collaborative relations?

Attitude toward Outside Firms	**Competition**	**Partnership**	(Sarasvathy, 2001) (Silberzahn, 2014)

11. On this topic, you or your organization are seeking to build partnerships or are you instead in a dynamic of competition?

Security requirements – Flexibility possibilities

Freedom of Expression	**Confidentiality**	**Total freedom**	(Own dimension)

12. On those topics, can you speak freely about your projects and share your ideas or are you constrained by a lot of restrictions in terms of confidentiality?

Degree of Autonomy	**Watchful Supervision**	**High Autonomy Flexibility**	**(Fayolle, 2007)**

13. On this project/subject, are you acting under a watchful supervision or are you totally free and enjoying a high autonomy of action?

Hierarchical level	**Global**	**Local**	(Avenier, 1997)

14. On this project/topic, do you have a global hierarchical level that allows you to commit on behalf of your entire organization or do you have a hierarchical position that bring you the possibility to insure individual commitment?

Value Seeking	**Conservation**	**Openness to change**	**(Schwartz, 1992)**

15. On this thematic, are you looking for to conserve-protect a competitive advantage or do you seek to become a newcomer opened to change in this area?

Risk

Position Seeking	**Rules-Security**	**Risk-Challenge**	(Borg et al., 2011)

16. On this topic/project, are you constrained by a lot of rules and looking for security and stability or do you have the possibility to take risks to answer stimulating challenges?

Risk Predisposition	**Expected Return**	**Affordable loss**	(Sarasvathy, 2001) (Silberzahn, 2014)

17. On this subject, Are you calculating your predisposition toward risks in terms of expected returns or in terms of affordable loss (time-money)?

Goals

Desired return	**Financial ROI (Market-driven)**	**Social ROI (Organization mission)**	**(Zahra, 2009)** **(Vega and Kidwell, 2007)**

18. On this topic, are you following a market-driven orientation seeking financial ROI or are you motivated by a mission to fulfil to society seeking a social ROI?

Social ROI	**Environment ROI**	**-**

19. On this topic, are you following a Social ROI or are you motivated by an Environmental ROI?

Environnent ROI	**Financial ROI**	**-**

20. On this topic, are you following an Environmental ROI or are you motivated by a Financial ROI?

Drive motives	**Business**	**Passion – Life style**	(Vega and Kidwell,2007) **(Mills and Pawson,2011)** (Fonrouge, 2002) (Marcketti et al. 2006)

21. Do you participate to this event because it is a Business requirement answering a need of representation or because the topic fits with your passions and personal interests?

Goals orientation	**LT Goals**	**ST Objectives**	(Marshall, 2013) (Collins et Porras, 1996)

22. On this thematic, are you seeking Long-Term Goals or do you need to reach instead very Short-Term Objectives?

Environment

Environmental Push	**Reactivity**	**Proactivity**	(Vega & Kidwell, 2007) **(Dana, 1995)**

23. On this project/topic, are you acting as a reaction to answer an external pressure of your environment or are you following instead a proactive process or an anticipating behavior?

Environmental Push	**Techno-push (offer)**	**Market-pull (demand)**	(Williamson, 1975) (Porter, 1980)

24. On this thematic, you or your organization are coming to offer a proposition of a technology/service/project (techno-push) or de you seek instead to express needs or identify new demands and potential markets (market-pull)?

Environmental Position	**Adaptive organization**	**Creative organization**	**(Gartner, 1985)**

25. On this subject, do you feel that you or your organization need to adapt to face the evolutions of your business environment or do you perceive that you have the means and the possibility to create your own reality-destiny?

Partners Proximity	**Close**	**Far**	(Torres et Gueguen, 2008)

26. In this project, do you seek to relate with partners acting in your close environment (location, sector, network) or do you wouldn't mind to commit with actors evolving in totally different environments than yours?

Environmental Perception	**Full of threats**	**Full of opportunities**	(Randerson et al., 2011) **(Jaouen, 2008)**

27. On this topic, do you perceive your environment as something full of threats or as something full of opportunities?

The combination of a such complementary set of characteristics and the hybridization of the generic and the contextual dimensions of RE profiles in a configurational approach is a promising path to facilitate their interaction and to increase their possibilities of collaboration at regional level. However, the list presented is not exhaustive and it is still adjustable by and for all organizers-facilitators regarding to the topic and the goals of each event. It requires to be completed to further improvements directed by complementary researches and empirical testing. It opens a research perspective for the design of new tools to support the recognition and the comprehension of each personalized RE expectations.

Several propositions are presented in the next section in order to support a better understanding of every RE profile. It aims to facilitate their interactions and their identification of potential partners to foster their probability of "matching".

5. Perspectives and propositions

Based on the developments presented in the previous sections three propositions are made.

5.1 Proposition 1: gathering the generic information of RE through the use of WeKeyInnovation

As a first step to collect information about the multiple dimensions of each RE profile we made possible to gather the "Generic" items progressively on the WeKeyInnovation through the different templates (Figure 2) that each RE will fill gradually online by the use of the platform. This process enables to collect progressively real-time and qualified information without recurring to usual methods, enquiries or any other usual procedures.

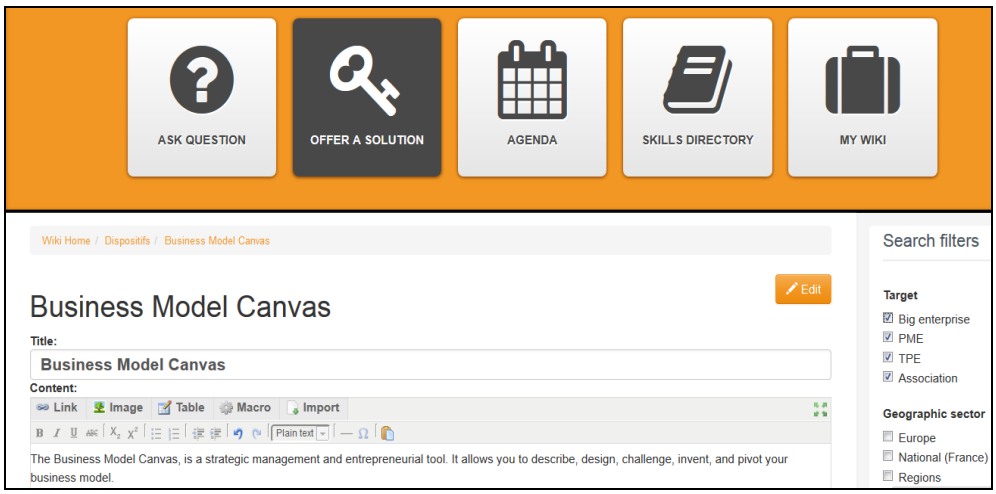

Figure 2 An example of WKI template

5.2 Proposition 2: the specification of working and business values of RE

To complement the first proposition and in order to make the link with the further specification of more contextual expectations, an intermediary step is proposed. It entails to get more precisions about each RE working values (Ros et al., 1999) its organizational culture orientation (O'Reilly et al., 1991), its business motivations and success expectations (Gorgievski et al., 2011); (Jayawarna et al., 2013).

Based on the investigations of (Bilsky and Jehn, 2002); (De Clercq et al., 2008); (Borg et al., 2011); (Cieciuch and Schwartz, 2012) a more "business-oriented" version of the Portrait Value Questionnaire (PVQ) of (Schwartz et al., 2001) which was originally applied to define the personal human values of individuals had been designed. The objective of this new version of the PVQ is to map all the working values in the circular motivational continuum of the 19 values defined in the refined theory of basic human values of (Ciecuch & Schwartz, 2015).

In addition, we suggest that the use of the refined theory of basic human values of (Cieciuch et al., 2014) makes it possible to map the OCP items that previous works didn't manage to classify into the previous version of the PVQ.

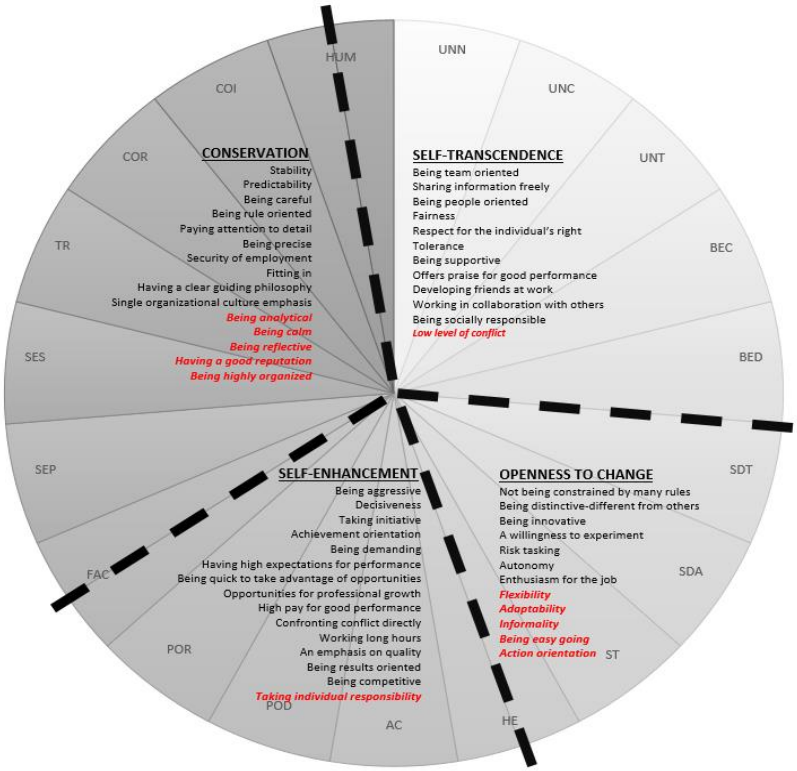

Figure 3 Crossing OCP items into the refined HUV theory

5.3 Proposition 3: the translation of dialogical questionnaires into attractive sliders and visual radar-charts

As a last contribution, we decided to integrate the "context-dependent" items into a set of dialogical questions to ask to each RE before they could participate to any event. The goal is to oblige RE to precise their instantaneous expectations regarding to the topic or their strategic goals at any specific moment because it is the relative importance of multiple values that will guide their action (Schwartz, 2006).

The idea to make coexist dialogical but compatible perspectives (Morin et al., 1990) and the interaction of antagonist visions (Avenier, 2005) are central issues of our approach in order to define unique profiles of RE and overcome the shortcomings of the past taxonomies which leaded to inaccurate stereotypes of entrepreneurs. The concern is to find new ways to traduce those abstracts dialogical expectations in more concrete and visual artefacts in order to increase the mutual understanding of RE and facilitate their possibility of collaboration.
To answer this challenge, the existing "dialogies" (Table 1) had been translated into smart questionnaires (Figure 4) to address to RE before they could attend to any workshop or networking event.

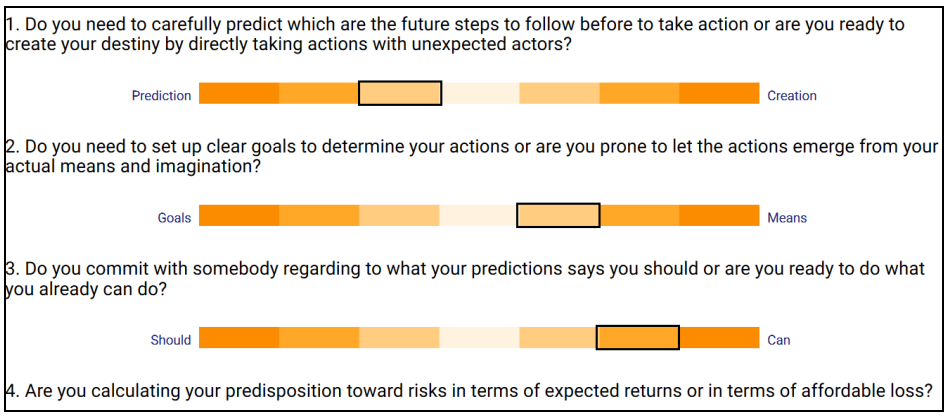

Figure 4 Examples of dialogical questions presented as attractive sliders

The answers are translated into radar-charts to get a smart representation of each RE profile (Figure 5). The objective is to use the set of visual radar-charts representing the range of RE profiles as actionable artefacts available to:

- build fruitful recommendations to all kind of facilitators,
- bring pertinent information to all RE before to identify and start to interact with the appropriate potential collaborators.

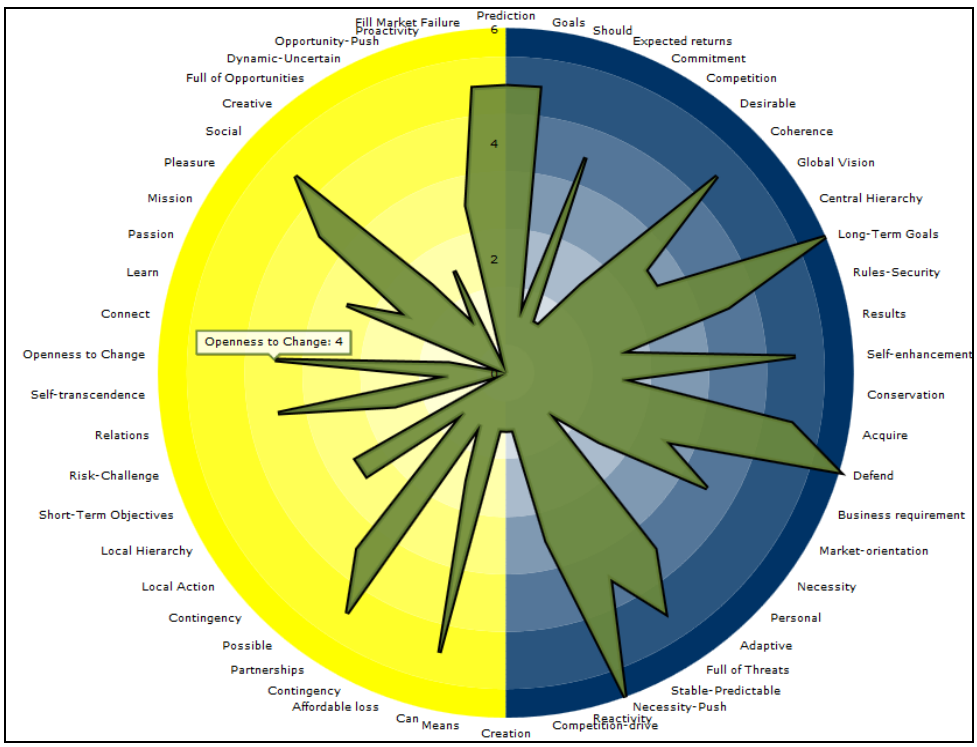

Figure 5 An example of radar-charts to give a visual representation of RE profile

6. Conclusion:

As a conclusion, the goal of our study is to get a better profile characterization of each RE to facilitate their mutual comprehension and increase their probability of "Matching" successfully. The aim is to enhance the "collaboration" between RE at regional level and to support a broader participation of smaller actors in the flow of the "bottom up" propositions of the ED process of RIS3.

This paper highlighted several shortcomings in different levels and areas of regional innovation strategy. We underlined first the limits of the actual ED process and the need for its instrumentation within heterogeneous European regions. Secondly we presented the use of the CBM approach as a suitable strategic tool to support the collective participation of a broader set of RE within the RIS3. However we pointed out the necessity to focus on the preparatory stage of those CBM processes in order to increase their efficiency. Third, we emphasized on the necessity to get a comprehensive characterization of RE profiles. As a first proposition, we presented a table embracing a configurational approach which combines both generic and contextual dimensions of RE profiles in order to grasp much of the multiple aspects which characterize each single and unique RE profile. A set of complementary propositions had been introduced to present:

- Several original alternatives to collect both generic and contextual items of RE profiles using a collaborative platform of innovation and answering smart dialogical questionnaires.
- A possible solution to represent each RE profile in visual radar-charts.

The main objective of this work is to:

- Include a broader set of unexpected RE which have not previously been consulted about the RIS3 initiative;
- Reach a more comprehensive view of their respective and instantaneous expectations;
- Facilitate their mutual understanding and their interactions;
- Support the identification of potential partners and foster their probability of "matching";
- Enhance the potential of collaboration between all RE in the long term to feed a continuous dynamic of co-constructed propositions within the ED process of RIS3.

This work opened a research perspective for the design of new tools to support the recognition and the comprehension of each personalized RE profile or expectations in order to facilitate their "matching" before to start CBM processes at regional level.

Acknowledgements

Authors would like to acknowledge our partner AGEFA PME for its support concerning the Chair on SMEs 3.0 and the NEPTUNE project that has received funding from the European Union's Horizon 2020 research and innovation programme.

References and Notes

Asheim, B.T., Boschma, R., Cooke, P., (2011). Constructing regional advantage: Platform policies based on related variety and differentiated knowledge bases. *Reg. Stud.* 45, 893–904.

Avenier, M.J., 2005. La stratégie «chemin faisant», *Economica*. Paris.

Baier, E., Kroll, H., Zenker, A., (2013). Templates of smart specialisation: Experiences of place-based regional development strategies in Germany and Austria. *Working Papers Firms and Region.* (No. R5)

Bilsky, W., Jehn, K.A., (2002). Organizational culture and individual values: evidence for a common structure. *Organ. Kult. Individ. Werte Belege Für Eine Gemeinsame Strukt.* Ed M Myrtek 211–228.

Bocken, N.M.P., Rana, P., Short, S.W., (2015). Value mapping for sustainable business thinking. *J. Ind. Prod. Eng.* 32, 67–81.

Boons, F., Montalvo, C., Quist, J., Wagner, M., (2013). Sustainable innovation, business models and economic performance: an overview. *J. Clean. Prod.* 45, 1–8.

Borg, I., Groenen, P.J., Jehn, K.A., Bilsky, W., Schwartz, S.H., (2011). Embedding the Organizational Culture Profile into Schwartz's Theory of Universals in Values. *J. Pers. Psychol.* 10, 1.

Boschma, R., (2014). Constructing regional advantage and smart specialisation: Comparison of two European policy concepts. *Sci. Reg.*

Breuer, H., Lüdeke-Freund, F., (2014). Normative Innovation for Sustainable Business Models in Value Networks, in: *The Proceedings of XXV ISPIM Conference-Innovation for Sustainable Economy and Society.* pp. 8–11.

Cieciuch, J., Davidov, E., Vecchione, M., Schwartz, S.H., (2014). A hierarchical structure of basic human values in a third-order confirmatory factor analysis. *Swiss J. Psychol.*

Cieciuch, J., Schwartz, S.H., (2012). The Number of Distinct Basic Values and Their Structure Assessed by PVQ–40. *J. Pers. Assess.* 94, 321–328.

Cross, B., Travaglione, A., (2003). The untold story: is the entrepreneur of the 21st century defined by emotional intelligence? *Int. J. Organ. Anal.* 11, 221–228.

Dana, L.P., (1995). Entrepreneurship in a remote sub-Arctic community. *Entrep. Theory Pract.* 20, 57–72.

Dara, M., (2013). Value networks and business models: formulating and demonstrating a methodology for the development of value networks and alignment of business models based on design science research methodology.

De Clercq, S., Fontaine, J.R., Anseel, F., (2008). In search of a comprehensive value model for assessing supplementary person—organization fit. *J. Psychol.* 142, 277–302.

Eppler, M.J., Hoffmann, F., Bresciani, S., (2011). New business models through collaborative idea generation. *Int. J. Innov. Manag.* 15, 1323–1341.

Espíritu-Olmos, R., Sastre-Castillo, M.A., (2015). Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *J. Bus. Res.* Special issue on The Spirit of Strategy. 68, 1595–1598.

Faham, J., Daniel, M., Legardeur, J. (2016) Toward a Matching Approach to Support CBM (Collaborative Business Model) Processes between Regional Entrepreneurs within the RIS3 Policy. Conference APMS 2016 (submitted - under revision)

Fayolle, A., (2007). Entrepreneurship and new value creation: the dynamic of the entrepreneurial process. *Cambridge university press.*

Filley, A.C., Aldag, R.J., (1978). Characteristics and measurement of an organizational typology. *Acad. Manage. J.* 21, 578–591.

Fillis, I., (2010). Creating a typology for the arts and crafts microenterprise. *Contemp. Microenterprise Concepts Cases*. 61–73.

Foray, D., David, P.A., Hall, B., (2009). Smart specialisation–the concept. *Knowl. Econ. Policy Brief 9*, 85–100.

Foray, D., David, P.A., Hall, B.H., (2011). Smart specialisation From academic idea to political instrument, the surprising career of a concept and the difficulties involved in its implementation. EPFL.

Gartner, W.B., (1985). A conceptual framework for describing the phenomenon of new venture creation. *Acad. Manage. Rev.* 10, 696–706.

Gorgievski, M.J., Ascalon, M.E., Stephan, U., (2011). Small business owners' success criteria, a values approach to personal differences. *J. Small Bus. Manag.* 49, 207–232.

Howe, J., (2006). The rise of crowdsourcing. *Wired Mag.* 14, 1–4.

Jaouen, A., (2008). Le dirigeant de très petite entreprise: éléments typologiques.

Jaouen, A., Lasch, F., (2015). A new typology of micro-firm owner-managers. *Int. Small Bus. J.* 33, 397–421.

Jayawarna, D., Jones, O., Macpherson, A., (2014). Entrepreneurial potential: The role of human and cultural capitals. *Int. Small Bus. J.* 32, 918–943.

Jayawarna, D., Rouse, J., Kitching, J., (2013). Entrepreneur motivations and life course. *Int. Small Bus. J.* 31, 34–56.

Johnson, M.W., Christensen, C.M., Kagermann, H., (2008). Reinventing Your Business Model. *Harv. Bus. Rev.* 86, 50.

Joyce, A., Paquin, R., & Pigneur, Y. (2015). The triple layered business model canvas: a tool to design more sustainable business models. *ARTEM Organizational Creativity International Conference.* Nancy, France.

Konnertz, L., Rohrbeck, R., Knab, S., (2011). How collaborative business modeling can be used to jointly explore sustainability innovations, *in: ISPIM Annual Conference*, Hamburg, Germany.

Korunka, C., Frank, H., Lueger, M., Mugler, J., (2003). The entrepreneurial personality in the context of resources, environment, and the startup process—A configurational approach. *Entrep. Theory Pract.* 28, 23–42.

Kroll, H., Muller, E., Schnabl, E., Zenker, A., (2014). From smart concept to challenging practice: How European regions deal with the Commission's request for novel innovation strategies. *Working Papers Firms and Region.* (No. R2/2014)

Laufer, J., (1975). Comment on devient entrepreneur. *Rev. Fr. Gest.* 2, 3–15.

McCann, P., Ortega-Argilés, R., (2013). Smart specialization, regional growth and applications to European union cohesion policy. *Reg. Stud.* 1–12.

Miles, R.E., Snow, C.C., Meyer, A.D., Coleman, H.J., (1978). Organizational strategy, structure, and process. *Acad. Manage. Rev.* 3, 546–562.

Mills, C., Pawson, K., (2011). Integrating motivation, risk-taking and self identity: A typology of ICT enterprise development narratives. *Int. Small Bus. J.*

Morin, E., (2007). Restricted complexity, general complexity. *Worldviews Sci. Us Philos. Complex. Singap. World Sci.* 5–29.

Morin, E., (1990). Introduction à la pensée complexe. *Esf Paris.*

Navarro, M., Gibaja, J.J., Franco, S., Murciego, A., Gianelle, C., Kleibrink, A., Hegyi, F.B., (2014). Regional benchmarking in the smart specialisation process: Identification of reference regions based on structural similarity. *Institute for Prospective and Technological Studies, Joint Research Centre.*

Navarro, M., Querejeta, M.J.A., Magro, E., (2011). Smart Specialisation Strategies: The Case of the Basque Country. Basque Institute of Competitiveness.

O'Reilly, C.A., Chatman, J., Caldwell, D.F., (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Acad. Manage. J.* 34, 487–516.

Osterwalder, A., Pigneur, Y., Tucci, C.L., (2005). Clarifying business models: Origins, present, and future of the concept. *Commun. Assoc. Inf. Syst.* 16, 1.

Rauch, A., Wiklund, J., Lumpkin, G.T., Frese, M., (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrep. Theory Pract.* 33, 761–787.

Robert, F., Marques, P., Lasch, F., Le Roy, F., (2009). Entrepreneurship in emerging high-tech industries: ICT entrepreneurs between experts and kamikazes. *Int. J. Entrep. Small Bus.* 7, 258–283.

Rohrbeck, R., Konnertz, L., Knab, S., (2013). Collaborative business modelling for systemic and sustainability innovations. *Int. J. Technol. Manag.* 63, 4–23.

Ros, M., Schwartz, S.H., Surkiss, S., (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology: an International Review*, 48 (1), 49-71.

Sarasvathy, S.D., (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Acad. Manage. Rev.* 26, 243–263.

Schwartz, S.H., (2006). Les valeurs de base de la personne: théorie, mesures et applications. *Rev. Fr. Sociol.* 47, 929–968.

Schwartz, S.H., (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Adv. Exp. Soc. Psychol.* 25, 1–65.

Schwartz, S.H., Melech, G., Lehmann, A., Burgess, S., Harris, M., Owens, V., (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *J. Cross-Cult. Psychol.* 32, 519–542.

Stahlecker, T., (2010). Cohesion policy in the light of place-based innovation support: New approaches in multi-actors, decentralised regional settings with bottom-up strategies?, *Working Papers Firms and Region.* Fraunhofer ISI, Karlsruhe.

Stefanovic, I., Prokic, S., Rankovic, L., others, (2010). Motivational and success factors of entrepreneurs: the evidence from a developing country. *Zb Rad Ekon Fak Rij* 28, 251–269.

Tödtling, F., Trippl, M., (2005). One size fits all?: Towards a differentiated regional innovation policy approach. *Res. Policy* 34, 1203–1219.

Vamvaka, V., Botsaris, C., (2014). Dimensions of Entrepreneurial Behavioural Beliefs, Attitude Toward Entrepreneurship and Entrepreneurial Intention. *Socio-Econ. Sustain. Reg. Dev. Spat. Plan. Eur. Int. Dimens. Perspect.* ISBN 978-960-93-6040-1 Ed. By 274.

Van Vliet, H., (2014). The Added Value of Business Models. *White paper. Amsterdam: Hogeschool van Amsterdam.*

Vega, G., Kidwell, R.E., (2007). Toward a typology of new venture creators: Similarities and contrasts between business and social entrepreneurs. *N. Engl. J. Entrep.* 10, 4.

Zahra, S.A., Gedajlovic, E., Neubaum, D.O., Shulman, J.M., (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *J. Bus. Ventur., Special Issue Ethics and Entrepreneurship* 24, 519–532.