
Editorial

Karim Messeghem

UFR Administration Economique and Sociale,
University of Montpellier 1,
Avenue Raymond Dugrand,
CS 59640, 34960 Montpellier Cedex 2, France
Email: karim.messeghem@univ-montp1.fr

Sylvie Sammut*

Institut des Sciences de L'Entreprise et du Management,
University of Montpellier 1,
Site Richter, Bât. B, Rue Vendémiaire,
CS 19519, 34960 Montpellier Cedex 2, France
Email: sylvie.sammut@univ-montp1.fr
*Corresponding author

1 Introduction

Over the last 30 years, support for start-ups has become a major challenge across a range of countries, with support programmes launched at national and regional levels to support young companies and SMEs. These public policies to boost innovation and entrepreneurship were introduced to develop new value-generating activities, with varying degrees of success (Bergek and Norrman, 2008; Grimaldi and Grandi, 2005). Entrepreneurial ecosystems have emerged from contributors such as incubators and science parks. Support for entrepreneurs has become transformed into a veritable industry involving both private and public players, although many European countries, including France, have prioritised support from public bodies (Aernoudt, 2004). The emerging structure and institutionalisation of this practice has been facilitated by national and international networks such as the National Business Incubation Association, allowing entrepreneurial support to gradually become a profession in its own right with certain requirements in terms of the capabilities of those involved.

Entrepreneurial support is a process of coproduction involving an entrepreneur and a backer (Chan and Lau, 2005; McAdam and Marlow, 2007, 2008; Patton, 2013; Rice, 2002; Soetanto and Jack, 2011). Specifically, it can be defined as a process that is structured in the long-term by a third party and which enables one or more project initiators or entrepreneurs to benefit from the dynamic of a learning curve (training, advice, etc.), access to resources (financial, informational, etc.), networks, services (administration, hosting, etc.) and assistance with decision-making (coaching, mentoring, etc.). Entrepreneurial support thereby eases the burden on young companies operating on a small scale and without the necessary legitimacy (Stinchcombe, 1965).

Over the course of this period, this theme has become the focus of research in the field of entrepreneurship. Two complementary approaches have been adopted. The first is based on the economic perspective, with a focus on the role played by territories in entrepreneurial dynamics and the impact of entrepreneurial policies (Al-Mubarak and Schröl, 2011; Audretsch et al., 2007; Colombo and Delmastro, 2002). What are the best policies to adopt? How should start-up support programmes be evaluated? Evaluation models have been developed to help answer these questions (Schwartz and Göthner, 2009; Storey, 2000). The second approach considers those involved in entrepreneurial support and the forms in which this support is provided. What are the characteristics of the incubation process? What factors determine the performance of incubators? Various studies have contributed to our understanding of the incubation process and the performance of incubators (Hackett and Dilts, 2004, 2008; Mian, 1997).

The objective of this special edition of the *International Journal of Entrepreneurship and Small Business* is two-fold. First, it provides an overview of current research on entrepreneurial support. To what extent has this practice become a major research topic in entrepreneurship studies over the last 30 years? What are the theories that can be used to explain it? And what are the prospects for research going forward? The second objective is to offer a broad reading of entrepreneurial support that accounts for specific geographic and cultural features, as this is an issue that is tackled differently from one country and from one culture to the next. Is it possible to propose a universal reading of entrepreneurial support? Are certain methods or support tools adapted to certain contexts? This edition addresses these questions by drawing on eight research papers from six different contexts: the USA, France, Scotland, the Netherlands, Belgium and Brazil.

Section 2 looks back on the history of entrepreneurial support. We then explore the diversity of the support structures available, before focusing on the issue of performance (Section 3). Finally, Section 4 provides an outline of the articles that make up this special edition.

2 The advent of an entrepreneurial support industry

Seventy years after the emergence of incubators, the world of entrepreneurial support is a hive of activity: a veritable support industry has now been formed (Audretsch et al., 2007; Messeghem et al., 2013). Having first served as a means of self-employment, start-up entrepreneurship has now become a reality, an economic driver and an ambition.

Creation, growth, internationalisation or firm acquisitions are key moments in the development of a business, and it is essential for us to 'secure' them as much as possible so as to prioritise the creation of national wealth and the maintenance – if not improvement – of employment levels. This has resulted in an increasing number of mechanisms and policies designed to boost start-up entrepreneurship, firm acquisitions, innovation and transfers, the corollary effect of which has been the establishment of a support industry.

The world's industrial economies have therefore shifted from managerial societies to become entrepreneurial societies (Audretsch, 2007). This shift can be observed in most developed countries (Baumol, 2002; Baumol et al., 2007; Audretsch, 2007). It is both an intellectual and an economic change which has produced an increasing number of support structures. Both the number and variety of mechanisms have grown. The National

Business Incubation Association (NBIA) (<http://www.nbia.org>) points out that in 1980 around 12 incubators operated in the US. By 1987, 70 new incubators were being setup each year, and in 2013 the NBIA recorded more than 7,000 worldwide, while Albert et al. (2003) had produced an estimate of 3,500 in 2000.

The last three decades included three key periods that had an impact on the entrepreneurial support industry:

- The 1980s to 1990s focused on restructuring. The crisis years affected employment levels, and new networks emerged to support and finance start-up entrepreneurs, also encouraging people to share their experiences. 1985 saw the creation of the National Business Incubation Association, which now includes 2,100 members and represents 60 nations. During this initial period, research in entrepreneurship focused on the key factors underpinning the success and performance of support structures (Greene and Storey, 2004; Mian, 1994, 1997; Smilor, 1987).
- The 1990s to 2000s saw the emergence of private players (business angels and venture capitalists) onto the funding market, as they were attracted by the innovation of new companies. This period also saw the emergence of private and virtual incubators. Start-ups took to centre stage and science parks began to develop (Phan et al., 2005). The internet bubble burst, taking with it some of these private structures.
- From the 2000s onwards, the contours of an entrepreneurial society became clear. During this phase, the public authorities sought to improve access to start-up entrepreneurship and above all to develop a better understanding of it in the long-term, as the first studies on the black box of entrepreneurial support began to emerge (Rice, 2002; Hackett and Dilts, 2004, 2008; Bergek and Norrman, 2008). The issue of the performance of support was now tackled in detail. This top-down approach was accompanied by bottom-up private initiatives such as accelerators, which developed in the US, Europe and Asia (Carayannis and von Zedtwitz, 2005), and the bottom-up business incubator (Bøllingtoft, 2012).

“The emergence of a new research field” (Chabaud et al., 2010) provided answers to a wide range of questions. What about the economic performance of support structures (Aernoudt, 2004; Phan et al., 2005; Shane, 2009)? And that of the companies they support (Aerts et al., 2007; Al-Mubarak and Schröl, 2011; Barbero et al., 2012; Mian, 1997; Schwartz, 2009, 2011, 2013; Tamásy, 2007)? How well do they satisfy the specifications to which they have committed, both in relation to their financial backers and their clients (Chan and Lau, 2005; McAdam and Marlow, 2007, 2008; Patton, 2013; Soetanto and Jack, 2013)? And what of the quality of the support provided and the professionalisation of the supporters themselves (Aaboen, 2009; Ahmad and Ingle, 2011; Hannon and Chaplin, 2003; Patton et al., 2009; Rice and Matthews, 1995; Somsuk and Laosirihongthong, 2014)? Following the golden age of incubators, the global economic situation raised a series of questions that were increasingly urgent in strategic terms, just as the availability of public funds was on a downward curve (Hackett and Dilts, 2008; Schwartz, 2013; Voisey et al., 2006). We are now witnessing a qualitative shift (Tamásy, 2007) in the mission fulfilled by incubators, whose heightened heterogeneity (Aaboen, 2009; Hackett and Dilts, 2004) ultimately produced extreme levels of specialisation, based on the need for both economic and social rationalisation. This led to an increase in

the number of proposals and diversified offers and forms of support, constituting a shift away from the general structures that represented the early years.

3 Diverse structures and forms of support

With the publication of studies by Aernoudt (2004), Bergek and Norrman (2008) and Aaboen (2009), the missions fulfilled by incubators became more specific. Whether in the context of conventional support, networking and the optimal exploitation of environmental resources (Autio and Klofsten, 1998; Bøllingtoft and Ulhøi, 2005), legitimisation (Messeghem et al., 2014), or real or virtual (online) business relationships (Carayannis and Von Zedtwitz, 2005; Nowak and Grantham, 2000), among others, incubators adapt to the needs and desiderata of those who initiate entrepreneurial projects (Bøllingtoft and Ulhøi, 2005; Grimaldi and Grandi, 2005).

Table 1 Typology of incubators

<i>Authors</i>	<i>Classification criteria</i>	<i>Types</i>
Carayannis and von Zedtwitz (2005), von Zedtwitz (2003), von Zedtwitz and Grimaldi (2006)	The strategic aims of incubators	<ul style="list-style-type: none"> • Regional incubators • University incubators • Virtual incubators • Independent commercial incubators • Incubators internal to businesses
Grimaldi and Grandi (2005)	Objectives of incubators, with a historical dimension	<ul style="list-style-type: none"> • Centres of innovation • University incubators • Private business incubators • Private independent incubators
Aernoudt (2004)	Objectives of incubators, with a historical dimension	<ul style="list-style-type: none"> • Mixed incubators • Economic development incubators • Technological incubators • Social incubators • Fundamental research incubators
Albert et al. (2003)	Multi-criteria: finality pursued, dominant activities in the projects, objectives, etc.	<ul style="list-style-type: none"> • Economic development incubators • Academic and scientific incubators • Business incubators • Private investment incubators
Bakkali et al. (2014)	Multi-criteria: finality pursued, dominant activities in the projects, objectives, target, etc.	<ul style="list-style-type: none"> • Economic development incubators • Academic and scientific incubators • Social incubators • Business incubators • Private investment incubators

Different types of incubators thus emerged (Aernoudt, 2004; Albert et al., 2003; Barbero et al., 2012; von Zedtwitz, 2003), and it is clear from nearly all of the articles presented in this special edition that the incubators which have been the subject of field studies are varied.

Economic development incubators are included in local programmes to boost economic development. As such, they are specialised to reflect the economic needs of the territorial ecosystem in which they operate.

Academic and scientific incubators facilitate technology transfers between a university or its research laboratories and the company. They benefit from state subsidies. Social incubators bring a social dimension to the economic objective, with both dimensions considered of equal importance. They also receive public subsidies. Business incubators are established within relatively large companies. It is their ambition to develop intrapreneurial talent within the organisation. Private investment incubators belong to venture capital companies or business angels looking to reduce the distance between them and the companies they finance. Other types of integrators can of course be found, but the above classification represents those most often cited in the international literature. Regardless of an incubator's specialisation, its link to performance is now an economic necessity.

4 Inside the black box of business incubation: the challenge of performance

Entrepreneurial support is a process of coproduction involving an entrepreneur (tenant) and a backer (incubator manager) (Rice, 2002). In order to understand the performance of an incubator, one must delve into the black box of business incubation (Hackett and Dilts, 2004), but also account for the interaction between the incubator and its environment (Vanderstraeten and Matthyssens, 2012). The literature on incubators has focused intensely on the question of performance and has proposed a great variety of performance indicators (Bakkali et al., 2013; Bergek and Norrman, 2008). Some authors argue that performance must be understood from the perspective of incubated entrepreneurs via surveys of their satisfaction levels (Plosila and Allen, 1985). Others suggest that performance is linked to those who provide the financing and the efficient use of the resources that they bring to incubators, which in turn transfer these resources in the form of support to incubatees (Colombo and Delmastro, 2002; Sherman, 1999). Finally, others insist on the need for a comparison with the best representatives from each category in order to justify performance levels and performance trends over time (European Commission, 2002). The table below provides a summary of the main indicators used in the literature.

The challenge is to develop a balanced measure of performance (Bakkali et al., 2013) that accounts for the objectives of the incubator as well as those of the main stakeholders (financial backers and incubatee companies), who have particular expectations in terms of economic development. Bakkali et al. (2013) suggest using a balanced scorecard to evaluate the performance of incubators. This tool takes into account factors such as learning and innovation, processes, the incubator-tenant relationship and ultimately performance in terms of economic and social development. The question of performance is addressed by several of the articles outlined below.

Table 2 Performance indicators for incubators

<i>Indicator type</i>	<i>Indicators</i>	<i>Authors</i>
Indicators centred on results	Number of incubated projects	Allen and Rehman (1985), Hisrich and Smilor (1988)
	Project completion rate	Allen and Rehman (1985), Hisrich and Smilor (1988)
	Jobs generated by start-up	Allen and McCluskey (1990), Markley and McNamara (1995), Sherman (1999)
	Survival of companies	Aerts et al. (2007), Lalkaka and Abetti (1999), Markley and McNamara (1995), Schwartz (2009, 2013)
Indicators centred on the incubatee	Incubatee satisfaction	Allen and Rehman (1985), Cooper (1985), Plosila and Allen (1985)
	Incubatee selection	Bergek and Norrman (2008), Campbell (1989)
Indicators centred on financial resources	Access to financial resources	Colombo and Delmastro (2002), Sherman and Chappell (1998)
	Facilitated access to economic and commercial partners	Bøllingtoft and Ulhøi (2005), Chan and Lau (2005), Peters et al. (2004)
	Reduction in operating costs	Chan and Lau (2005), Colombo and Delmastro (2002), Sherman and Chappell (1998)
Indicators centred on networking	Identification of network players and resources to be deployed	Pena (2004), Peters et al. (2004)
	Incubatee membership in professional networks	Hughes et al. (2007), Pena (2004); Soetanto and Jack (2013)
Indicators centred on processes	Organisation's ability to provide tailored responses	Lichtenstein (1992), Studdard (2004)
	Competent handling of legislation	Smilor (1987)
	Active participation	Hackett and Dilts (2004), Rice (2002), Studdard (2004)
	Tools made available	Bøllingtoft and Ulhøi (2005), Lichtenstein (1992)
	Services proposed	Autio and Kloftsen (1998), Peters et al. (2004)
Indicators centred on management	Innovation and quality of incubator's management	Bearse (1998), Mian (1997), Somsuk and Laosirihongthong (2014)
	Information system adapted to the organisation	Smilor (1987)
	Exchange of good practices	Sherman and Chappell (1998)
	Experience of backers	Clarysse et al. (2005)
	Professional training for backers	Campbell (1989), Mian (1997), Rice and Matthews (1995)
	Identification of people with key skills	Smilor (1987), Sherman and Chappell (1998)
	Network membership	Smilor (1987)

Source: Bakkali et al. (2013)

5 Presentation of articles

Some of the articles reveal the many different types of incubators (Mian, 2014; Chandra et al., 2014; Gabarret et al., 2014), others explain the interactions that take place between those involved in entrepreneurial support (Vanderstraeten et al., 2014; Vedel and Gabarret, 2014; Messeghem et al., 2014), while the remaining papers focus on the diverse forms of support available (Kearney and McHattie, 2014; van Teeffelen et al., 2014).

5.1 Incubator types

There is a wide variety of incubators, as described above. This diversity makes it possible to satisfy the many different forms of entrepreneurship. The following three articles focus on innovative companies, outlining the different types of structure and in most cases offering a comparative reading. All three discuss the question of performance.

Sarfraz Mian looks back on the history of support structures in the USA, focusing on the last three decades and in particular the policies implemented to encourage the development of innovative technology-based firms. The aim of this research is to describe the trajectories followed by incubators and science parks and identify the best incubation practices from a benchmark perspective. Using a longitudinal study, Mian describes the business incubation programmes introduced from the 1980s onwards with a view to supporting young and innovative companies. His analysis is carried out using a model comprising three variables:

- 1 performance outcomes
- 2 management policies and their effectiveness
- 3 services and their value-added.

He shows how the four structures analysed had to develop their mechanisms and services in order to meet the changing needs of their clients. The four science parks and incubators are shown to have close links with universities and research centres. They operate as regional entrepreneurial platforms and share the common objective of achieving regional economic growth by supporting the development of technology-based firms. The search for performance is a major characteristic, reflected in the application of indicators and comparisons with peer organisations.

Aruna Chandra, Chia-An Chao and Evelin Cristina Astolpho explain that the rise of business incubators in Brazil was mainly due to the strong links between universities, companies and government. They point out that specific local features require incubation models to be adapted, making for very interesting reading. University and non-university affiliated incubators have to vary their sources of financing. A comparison based on 49 incubators in São Paulo State reveals that university-affiliated incubators manage to secure more varied and greater levels of financing than their non-affiliated counterparts. This can be partly explained by the fact that good practices are exchanged more naturally between affiliated incubators.

Inès Gabarret, Annabelle Jaouen, Walid Nakara and Benjamin Vedel focused on a not-for-profit incubator outside of a major city in the south of France, a geographic location which makes it difficult to submit projects given that the competition from incubators in large cities nearby denies them access to many of the projects suitable for

incubation. This competition, which has received little attention in the literature, is the source of interesting findings. The detailed study of this single case highlights paradoxical project selection practices in terms of the incubator's strategic positioning objectives and the availability of resources. The authors demonstrate that the resources available do not correspond to the incubator's strategic choices: neither its networks nor its partners appear to be sufficient to stimulate the organisation's development, making it less attractive to potential investors and in turn less attractive to project initiators, thus stunting its growth.

5.2 Interaction between those involved

The incubation process involves interaction between the different players: incubator managers, tenants, financial backers, etc. Their objectives may vary, making it difficult to measure performance. How can performance be measured in a balanced way? Performance depends on the quality of the relationship between the incubator managers and their tenants, particularly in terms of trust. The following three articles address the interaction between those involved, emphasising the importance of performance, trust and motivation in committing to a relationship.

Johanna Vanderstraeten, Paul Matthyssens and Arjen van Witteloostuijn consider how to provide a balance measurement of performance, suggesting the use of a balanced scorecard. The appeal of this tool is to extend beyond objective and individual measurements, such as tenant survival or the incubator's occupancy rate, which tend to be favoured in the literature on incubators. The balanced scorecard and strategy card developed by Kaplan and Norton advocate a balanced overall approach to performance using a range of configurational characteristics and measures. These tools enable both internal alignment, by accounting for the incubator's internal processes, and external alignment based on the expectations of tenants, especially in relation to the services provided. Vanderstraeten, Matthyssens and van Witteloostuijn adapt the balanced scorecard and strategy card to the context of non-profit economic development incubators using qualitative research based on in-depth interviews and workshops. They conducted a study of nine incubators from the province of Antwerp. Interviews carried out with tenants and incubator managers, together with focus groups, enabled them to develop a modified version of the balanced scorecard and strategic card. Their analysis focuses on four financial pillars: rent from tenants (stable and diverse tenant portfolios), paid services (value creation effectiveness), cost cutting (efficient functioning) and subsidies/sponsorships (entrepreneurship and business development). These pillars are analysed in terms of external alignment (customer perspective) and internal alignment (from the perspective of innovation and learning and internal business processes). Measurements are proposed for each of these dimensions. The adaptation of the balanced scorecard is appealing for incubator managers and funding organisations to the extent that it provides a benchmark for incubators and is therefore useful in allocating resources.

The relationship between tenants and incubated managers tends to be overlooked in the literature, although it is central to the incubation process (Rice, 2002). Benjamin Vedel and Inès Gabarret set out to address this oversight by focusing on the role of the contract and trust between the two parties. The interaction between tenants and incubator managers allows entrepreneurs to develop their store of knowledge but also to provide information about the level of progress made on their project. Information and knowledge are therefore central to this relationship. This is an issue also found in the

agent-principal relationship, as addressed by agency theory for example. Where there is uncertainty in the relationship, there is a risk of opportunism in terms of adverse selection and moral hazard. Contractualist theories emphasise the importance of control. The interpersonal perspective is critical of this reading, highlighting its asocial nature and the failure to take trust into consideration. Vedel and Gabarret adopt this dual theoretical reading with a view to analysing the determinants of information exchange and the development of knowledge. Trust and the contract between tenants and incubator managers are considered in relation to these two variables. In order to test these relationships, an empirical study was carried out in France involving incubated companies. The findings show that trust and the contract between the two parties play a positive role in the exchange of information and the development of knowledge in incubated companies.

The notion of trust is often associated with that of legitimacy in the literature. Karim Messeghem, Sylvie Sammut and René Pierre Beylier consider support structures in terms of the legitimacy they can bring to project initiators. Drawing on the neo-institutional theory and the opportunity-based approach, they show that the competitive and professional legitimacy of entrepreneurs is essential in explaining their decision to join an incubator and the entrepreneurial process. They establish a classification based on four profile types taken from a study involving 99 entrepreneurs from 12 French incubators. This shows that the expectations and motivations in terms of the choice of incubator differ, and also that the four profiles identified behave differently both when it comes to pursuing opportunities and networking.

5.3 Forms of support

The heterogeneity of entrepreneur profiles reflects the variety in the available forms of support, as is made clear in the last two articles presented in this special edition. They show that entrepreneurial support can concern existing companies but also potential entrepreneurs such as students.

Gemma Kearney and Lynn-Sayers McHattie consider open innovation and the way in which organisations can encourage Scottish SMEs to be innovative. With reference to *Chiasma*, an innovation workshop that is developing a collaborative approach involving SMEs, designers and academics, the authors show how collective work stimulates creativity, facilitates immersion in business networks and opens up new perspectives. Cultural change leads to new forms of involvement and the exchange of good practices. This article reveals an interest for collaboration with design disciplines which could become a driver of innovation and contribute to creating economic value. *Chiasma* is an emerging model providing a forum to allow collaborative work and active network participation, bringing together designers, academics and SMEs.

It involves a cultural shift from a closed innovation system to an open innovation system. Briefly, open innovation represents a place where people freely trade their wares and skills, and here the *Chiasma* model offers both a forum for this to occur and specific design techniques to encourage collaboration.

Entrepreneurial support tends to focus on start-up entrepreneurship and overlook other modes of entry such as firm acquisition or franchising. Lex van Teeffelen, Edwin Weesie and Lorraine Uhlaner address this by analysing the intentions of students. Specifically, they set out to show that the intentions of students can be modified when

they have access to information about alternative entry modes. Their work draws on threshold theory (Gimeno et al., 1997). The criteria to emerge from this theory – choice options, opportunity costs and psychic income – are correlated with this change in attitude. Their model is enriched with the notion of human capital, which is linked with choice options. The authors carried out a study involving third-year students who had opted for an entrepreneurship minor on firm acquisition and franchising. The respondents were asked to consider several entrepreneurial entry options by following a six-week course on various alternatives to start-up entrepreneurship: firm acquisition, family succession and franchising. The authors' qualitative and quantitative analysis confirms their propositions. The course followed by the students contributed to a shift in attitudes in line with threshold theory. The findings also enrich this theory by taking into account other dimensions such as personality traits. From a managerial perspective, this research provides solutions to the challenges associated with the handover of companies and the lack of successors in SMEs, with an emphasis on the potential role of universities.

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