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Supportive networks among companies: Key factors of success and failure

By

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Abstract

The role of entrepreneurial networks in the development of Small and Medium-sized Enterprises (SMEs) and the associated entrepreneurial activities are a core topic in both the networks and IMP literature. However the effectiveness of these networks remains little understood. This paper investigates a specific form of formal entrepreneurial network: the supportive networks among companies. More precisely, it seeks to identify the key factors of success and failure of these networks in their actions to support small and new business development by focusing on the interactions between the three categories of actors embedded in these networks. Eleven case studies were undertaken focusing on three French supportive networks between companies. The results showed that convergent interests - altruistic as well as economic - shared both between and within companies is the overarching reason why supportive action succeeds. We also found that interactions driven by non-trading interests contribute favourably to the development of the dynamics of these networks.

1. Introduction

For several years, the SMEs and their entrepreneurial activities - as sources of job creation and the innovation stimulus they inject - have been recognised as a pillar of economic growth, both in developed markets (Acs & Szerb 2007; Audretsch & Fritsch, 2003) and emerging markets (Karpak & Topcu, 2010; Naudé *et al.*, 2014). Given the pivotal role of these companies in today's economy, a range of support and incentive programs for small businesses developed by governments have emerged at a national or regional level. At the same time, formal entrepreneurial networks aimed at sustaining entrepreneurship development have been created. Some of them are initiated by policy-led organizations, i.e. the Entrepreneur's Club of the Paris Chamber of Commerce studied by Lefebvre *et al.* (2015), while others have been done by private organizations. We focus our research on the second type of formal entrepreneurial networks, which we term "Supportive networks among companies."

In France, at the local level, there are several networks of this nature which were born since the late 1980s. In this network, some companies play the role of the "supportive" actors (Sve), altruistically supporting another firm in their territory, usually small businesses, which then become the "supported" companies (Sed). From a practical point of view, this network is reflected in the establishment of tripartite co-operations. Micro-institutions are created to connect Sves and Seds, but they do not intervene directly in the transfer of competencies or resources, merely acting as a "Mediating Entity" (ME). The ME is typically a formal association, set up by entrepreneurs, firms, or by regional or national institutions.

In these supportive networks, cooperation leads to resources being transferred from the Sve to the Sed. This may entail the transfer of managerial skills, technical skills for applied research, development of products or processes, support for companies in their domestic market or for export, or the search for

financial partners. These interactions can take multiple forms. They may be occasional face-to-face meetings; the provision of staff (executives, engineers, researchers) similar to *pro bono* consulting or skill-based sponsorship, or of materials (laboratories, equipment, infrastructures); or the introduction into other professional/business networks. These are networks designed specifically to support the development of businesses within the defined region.

This specific network differs from the business and entrepreneurial networks classically studied in the literature in the light of the following characteristics:

- It is a *collaborative* network,
- ... initiated by a *decision*, and
- ... focused on a *wide range of resources*

The supportive networks appear to be doubly virtuous. First, they enable the Sed to acquire resources and competencies. For example, one of the oldest of these French supportive networks reported having come to the aid of 9 400 small businesses between 1986 and 2015. Secondly, they aim to promote regional development while also reducing the need for public investment. This network, through its action, claims to have created or safeguarded about 30,000 jobs during the last 5 years.

On their websites, these supportive networks between companies often highlight many examples of successful support of SMEs. However, there is no detailed reporting on the global efficiency of these networks' collective actions. It is also impossible to identify the motivations and obstacles that hinder the interactions between actors embedded in the networks. With this in mind, the main objective of this paper is to identify the key factors leading to success or failure within these specific networks. To do that, we adopt a perspective based on methodological individualism by considering the interactions between the Sve, Sed and ME as our unit of analysis.

We first provide a conceptual background to outline the supportive networks among companies' characteristics. Then, we present our methodological approach and our main findings, and we discuss several theoretical and practical implications of studying these entrepreneurial networks.

2. Conceptual background

Several studies consider the role of the network in the SMEs and new business development as a major theme. They belong to two fields of literature: the entrepreneurship literature and/or the IMP literature (Bocconcelli & Pagano, 2015).

Within the literature on entrepreneurship, the network approach to entrepreneurship has been initiated by a research group around Howard Aldrich (Aldrich and Zimmer, 1986). It is based upon the premise that a network is important because it provides the entrepreneur with access to the necessary resources. In this literature, the topic of social networks is a prominent and outstanding issue (Brüderl & Preisendörfer, 1998). It is assumed that entrepreneurs who benefit from social networks in the start-up period of their business are more successful because they have better access to resources. This is shared by the IMP literature. The access to the resources that are not internally available to the firm, but available through the network in which the firm is embedded, is crucial. Within the context of SMEs, because of their size and the consequent lack of resources, the network plays a vital role in enabling innovation and thus growth (Leek & Canning, 2011; Naudé *et al.*, 2014).

In our literature review, we mobilise these two fields of research as well as the works on meta-organisation in order to identify the specific characteristics and stakes of the networks studied.

2.1. A *collaborative* network

Within the network literature, studies of networking have focused mainly on business networks between companies, examining the interactions between suppliers and buyers (Håkansson *et al.*, 2009). It has tended to neglect collective network-level views (Rampersad *et al.*, 2010), with the exception of the works on collaborative innovation networks (e.g. Ramos *et al.*, 2013). The purpose of the supportive network among companies is not to promote trading relationships, but to create favourable interaction conditions for helping entrepreneurs to become better practitioners (Kakavelakis, 2010). In their study of a formal entrepreneurial network, Lefebvre *et al.* (2015) give evidence of the progressive network transformation from a social network to a community of practice. The involvement of the Sve in these networks is therefore a non-market strategy (Baron, 1995), whose nature is altruistic and collaborative.

We can therefore assume that the voluntary collaborative commitment of both the Sve and the ME, are the sharing of common goals and also to help foster the success of these networks. However, barriers to collaborative action in networks are highlighted in the literature, such as the pursuit of divergent interests or the companies' self-interest *versus* collective interest (Frow *et al.*, 2011; Finke *et al.*, 2016; Munksgaard & Medlin, 2014). More specifically, Finke *et al.* (2016) stress that the economic reasoning of an actor can collide with the collective interests of the others actors in public-private collaborative networks, and then be a source of diverging interests between the actors. According to Håkansson (1982), **who** argues that the interaction between businesses is driven and maintained for economic reasons, **they** observe that when the economic rationality is weak, as is the case in the collaborative network, interaction is impeded. The argument is rather clouded by the fact that in the supportive networks among companies, the emergence of a trading relationship between the Sve and Sed is certainly possible. The question therefore emerges as to whether the existence of a trading relationship between the two parties acts as a positive or negative mediator of the relationship quality. Another barrier to collective inaction identified by Finke *et al.* (2016) is differences in the goal orientation. For example, it may be that differing perceptions on what the actual aim of the collaborative network is (do we also want to trade or not?) negatively influences the way that actors interact with each other and hence weakens the collective action.

2.2. ... initiated by a *decision*

The networks studied in this paper could be described, as meta-organisations, whose members are organisations and the creation results from a formal decision (Ahrne & Brunsson, 2005). Such decisions, the conscious choice of acting in one way rather than another, is a key aspect of organising and designing the network. Unlike networks that emerge from interactions over time, these meta-organisations provide an organised form for collective action among legally autonomous entities. They have a specific and identifiable date of creation.

Such meta-organisations, based on collective action, prevail today in many sectors and take a wide variety of forms. They could be professional or trade associations (Ahrne & Brunsson, 2005), or formal entrepreneurial networks (Lefebvre *et al.*, 2015) like the Entrepreneurs' Club of the Paris Chamber of Commerce. Other formats are public-private network initiated to develop collective responses to climate change (Finke *et al.*, 2016). In addition, platform providers like Microsoft, Apple, and Google cultivate thriving developer communities; or large philanthropic funds like the Bill & Melinda Gates Foundation fund, monitor and direct meta-organizations of non-profit agencies (Gulati *et al.*, 2012).

According to Ahrne & Brunsson (2010), a meta-organisation is complete if it validates five criteria: it is of a hierarchical nature (*hierarchy*), it has a defined and exclusive body of actors (*membership*), it sets and applies rules (*rules*), it instigates monitoring systems to check the application of these rules (*surveillance*), and it has positive or negative sanctions to reward or punish compliance with the rules (*sanctions*). They argue that any meta-organisation is incomplete if it does not meet all of these criteria. The approach in terms of meta-organisation of supportive networks among companies leads us to question their complete or incomplete nature and, more broadly, their dynamics.

2.3. ...focused on a *wide range of resources*

The different forms of resources acquired by SMEs and new businesses through their networking activities are widely studied in the literature on entrepreneurial networks. Most empirical research in the field uses the “personal network perspective” and focuses on the role of the family and/or groups of friends and acquaintances of the entrepreneurs both before and after the creation of new business. The resources acquired by entrepreneurs can be classified into three broad areas (Jenssen & Koenig, 2002): informational resources (knowledge), motivational resources; mental and social help necessary to promote entrepreneurial action (Johannisson, 1988) and generate action (Aldrich & Zimmer, 1986); and material resources (time, technologies, people). The authors agree that it is easy to get necessary information but also motivational resources through acquaintances.

On the other hand, there are certain types of resources such as finance and practical help which entrepreneurs also need, but which require the individual(s) providing such help to know the entrepreneur before the resources are required (Jenssen & Koenig, 2002). The acquisition of these material resources is thus permitted within formal entrepreneurial networks such as those the supportive networks among companies. Acting also as “brokers”, these networks can play a linking role between the entrepreneur and others actors having complementary interests and expertise and offset the “structural holes” (Burt, 1992).

Another feature of these networks is therefore that they can provide a wide range of intangible and tangible resources, wider than the more general innovation networks. At this stage, we can question whether the nature of the resources (material or immaterial) or its diversity influences the efficiency of the network.

In the light of this literature review, we conclude that the identification of the key factors influencing the success or failures of supportive networks among companies involves several inter-linked levels: the actors' motivations and interests, their interactions through the nature of the bonds as well as the resources provided and their assessment, and the network development and its dynamics.

3. Method

3.1. Data collection

Three different supportive networks among companies in France were chosen for examination using a qualitative case study approach, as defined by Yin (2013):

- ALPHA set up on the initiative of major French industrial groups,
- BETA set up on the initiative of entrepreneurs of various sized companies, and
- GAMMA set up by local economic institutions.

Data were collected using interviews with actors embedded in the three supportive networks, regional economic press, companies and ME websites and short interviews with other partners of these networks, in particular, professionals working in local development institutions with solid knowledge of what occurred.

We have carried out eleven case studies. Each case study corresponds to a supportive group involving a triad of Sve, Sed and ME (see Table 1.).

Table 1. Presentation of case studies

| Case ¹ | Sve | Sed | ME | Sed activity | Nature of the resource expected |
|-------------------|-------------------------|-----|-------|--|--|
| 1 | Atomic research/Defence | NET | ALPHA | Industrial innovative vision solutions | Technical competences for applied research |

¹ The names of the networks are anonymised in order to keep our freedom of criticism while continuing to collaborate with them.

| | | | | | |
|------------|------------------|-----|-------|--|---|
| 2 | Atomic research | SUN | ALPHA | Solar street lighting solutions | Technical competences for applied research |
| 3 | Aeronautic | VEL | ALPHA | Air traffic optimisation solutions | Computer hardware resources |
| 4 | Energy | AET | ALPHA | Audible and visual signalling safety equipment to industries | Technical competences for applied research |
| 5 | Energy | BGH | ALPHA | Gas treatment technologies | Technical competences for applied research |
| 6 | Aeronautic | KEP | ALPHA | Aircraft development for civil protection | Search for financial partners |
| 7 | Regional SME | NAI | BETA | Agricultural robots and autonomous guidance and control | Strategic thinking |
| 8 | OEM | BOU | GAMMA | Industrial boilermaking | Organisation consulting |
| A9 | Total / Herakles | NOV | ALPHA | Design of a mosaic making process | Technical competences for industrialisation |
| 10 | Total | SCH | ALPHA | Aircraft refuelling vehicles | Technical competences for product development |
| 11 | Regional SME | NAT | BETA | IT support services | Commercial development |
| Interviews | 7 (1) | 16 | 6 | | |

For each case study we have interviewed all three actors, i.e. the Sve, the Sed and the ME. The perspective of the managers of the Sed is crucial. They are the ones who are best able to describe the expectations, the nature and the quality of the support provided to them, as well as the successes and failures encountered. The lack of hierarchical power and the facilitation role played by the MEs meant that they could not provide detailed information on the interactions within their networks. We have also interviewed Sve representatives who were involved in the supportive networks. Some of these representatives have participated in several of these collaborations, something that is also true for the MEs. Our empirical study is being finalised. The last case studies will focus on studying further these supportive networks set up by both BETA and GAMMA.

To date, we have conducted 29 interviews. For practical reasons, the majority of these interviews were prearranged telephone discussions. The interviews typically lasted from 30 minutes to 2 hours and were recorded.

3.2. Data analysis

In order to reveal the key factors determining success and failure of the supportive networks studied, we used the ARA Model (Ford *et al.*, 2010). According to this model, the outcomes of interactions in relation to collective action can be described through actor bonds, activity links and resource ties between actors (Snehota & Håkansson, 1995). This model is frequently used for the analysis of collaborative networks (Finke *et al.*, 2016, Lundberg & Andresen, 2012).

Furthermore, within-case and cross-case analyses were carried out. For the within-case analysis, two data analysis strategies were combined. First, a narrative strategy was used, which may be a preliminary step to other strategies of analysis (Eisenhardt, 1989). It consists of summarizing each case from the raw data. These summaries were based on the interactions between the three categories of actors in the network: Sve/Sed, Sve/ME and Sed/ME. The narrative strategy was then supplemented by a matrix strategy allowing the organisation of the data and the easier emergence of conclusions. It is also a prerequisite for our cross-case analysis (Miles & Huberman, 1994).

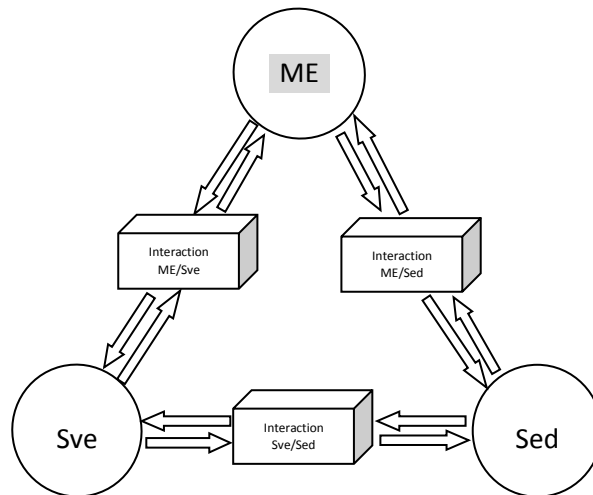
4. Findings

4.1. Presentation of three representative case studies

We carried out a summary of each case study observed (see Figure 1.) using the ARA model as a data

analysis grid.

Figure 1. ARA Model as analysis grid of case studies



- Arrows from a partner to an interaction represent approaches of interactions by each partner.
- Arrows from interactions to partners represent the assessments of interactions.

In order to facilitate the reading of our paper, we decided not to present the summaries of all eleven case studies, but focus instead on three exemplary case studies that appear representative of the totality of the observed interactions.

- *Example of a successful triad without any trading relationship*

NAI is a young company that designs and produces robots. It employs twenty people.

Approaches of interactions: NAI's key interest in the interaction with the ME is to be considered as a company with great development potential. Its interest in the interaction with the Sve is to be supported in its development strategy. After being evaluated by the network's organizers, it is "laureate" and can be introduced to the Sve. The manager is put in touch with CEOs of two SMEs. One of them is acting in an industrial sector unrelated to robotics; the other one is acting in the services sector. Over more than a year, the three CEOs meet each other once or twice a month. The interest of the CEO is to identify new managerial situations. It is also to enhance the local development of his territory in which is much embedded.

Assessments of interactions: all sides are very positive. The Sed's manager affirms: "It is the most useful support I ever had. (...) Better than when the enterprise was in an incubator. The advice was more technical and relevant." He also highlights that his partners "were very involved. They paid to be in this network, they give time and ask for nothing in return." He expresses the feeling of having received more than he has given. Concerning his potential future links within the network, the Sed declares that he would accept to be involved in the network as a Sve, in return for his positive experience. The experience for the Sve manager we talk with is positive because he found the interaction both efficient and effective. The ME local representative has had great feedback from both the Sve and the Sed, and thinks that they will be reliable partners for the future.

- *Example of a successful triad with a trading relationship*

VEL is a startup consisting of just three people. It develops a gas processing technology, which has a range of different applications in the general field of industrial engineering.

Approaches of interactions: The Sed's manager needs to be supported in developing a new industrial application of his process. The ME representative puts the Sed's manager in touch with a large company within the same sector. This company had a first meeting with the Sed and then agrees to support him. Immediately the cooperation becomes effective. During the interview, the Sve mentioned that the main reason for their supportive involvement was to implement their CSR policy. All the information we gathered during the triangulation phase by searching information on web sites and by participating in different meeting with the ME and other Sve confirm this point of view.

Assessments of interactions: Gradually, the interaction is strengthened and an applied research contract is concluded. The Sve becomes a Sed client. Sve and Sed representatives declare themselves to be very satisfied with the interactions. The interaction will remain active in the future. The Sve representative insists upon the impact of this cooperation on the increasing specialization of the local place. The Sed manager tells about the Sve: *"Collaborating with them is 50% about CSR and 50% about business"*. The Sve will remain interactions with the ME but the Sed will not.

- *Example of a failure with a trading relationship*

The situation of NET is very similar to that of VEL. It is a young start up, employing three people and dedicated to research and industrial applications. It designs imaging systems for non-invasive analysis of materials.

Approaches of interactions: The Sed's main interest was to be in touch with a company able to support it in the drafting of specifications for industrial applications. The ME provided it with a contact in a large company acting in the same area. The Sve told us that the main target was to provide support to local companies in order to strengthen local employment. Another target was to keep aware of innovation in their business sector.

Assessments of interactions: At the beginning, the Sed manager reported that cooperation to be positive. But two problems emerged quickly. He comments: *"First, they accompanied us in our research but at the same time they were asking us to produce an intensive work. They are interested in our technology for themselves. This cooperation led us to give them more than we were receiving."* Secondly, the Sve R&D department perceived the Sed as a competitor because it was more innovative and this could call into question their skills. The Sve's top management wanted to develop deeper interactions, while their R&D staff wanted to reduce it. The supportive action stopped.

There is a positive point: *"[The Sve] is interested in our company. It has enhanced our image with some of its subcontractors. They have considered they could improve their relationships with their client [the Sve] by integrating our technology. That cooperation opened doors for us."* Both Sed and Sve are integrated in common social and entrepreneurial networks. First, those networks and actor bonds have facilitated the relationship between Sed and Sve but they have not changed the nature of the interrelationship. This one has become too opportunistic with the top management and too competitive with the R&D department.

4.1. Within-case analysis: matrix of the main results

In table 2 below we show all 11 case studies. The first thing to note is that in all cases when a supportive action was not initiated (cases 1, 6, and 9), the Sve/Sed relationship was a failure. When some form of supportive action was initiated, we indicate in the table whether it has resulted in either success or if it has been interrupted (failure). We then clarify whether the Sed and Sve considered, early in the relationship, whether or not a trading relationship could be initiated. We show whether such a trading relationship has subsequently materialised or not. The last column highlights the partners' explanations of the success or failure of the supportive action (these opinions could come from the Sve, Sed, or ME)

Table 2. Within-case analysis: main results

| Case | Has a supportive action been initiated? | The Sed's assessment of the interaction | Was a trading relationship a considered option? | Has a trading relationship been initiated? | Success or failure key factors |
|------|---|---|---|--|--|
| 1 | No | Failure | Yes | No | . Competitive relationship with the R&D division of the Sve . Relationship too opportunistic : the Sve tried to receive more resources than to give . Unbalanced relationship with another Sve : this Sve tried to get research funds more than to cooperate |
| 2 | Yes | Success | Yes | Yes | . Complementarity of competencies . Cultural proximity . Business networks |
| 3 | Yes | Success | Yes | Yes | . Overlap of personal network and relationship with the Sve |
| 4 | Yes | Success and failure | Yes | Yes | . The Sve has a great interest, as a future user, in the applied research project. . Problems arising from sales cuts and payment deadlines |
| 5 | Yes | Success | Yes | Yes | . The Sve has a great interest, as a future user, in the applied research project. |
| 6 | No | Failure | Yes | No | . Difficulties to identify the right Sve . Cultural distance |
| 7 | Yes | Success | No | No | . Strong involvement of the Sve in the interaction . No ambiguity between trading relationship and supportive one |
| 8 | Yes | Success | No | No | . Strong involvement of the Sve . Involvement of the Sve CEO . No ambiguity between trading relationship and supportive one. . Unbalanced interaction in favour of the Sed reinforced its involvement |
| 9 | No | Failure | Yes | No | . Lack of involvement of the Sve in the cooperation because there was no business opportunity in the interaction |
| 10 | Yes | Failure | Yes | Yes | . Transfer of technical competencies disrupted by a commercial litigation with a Sve subsidiary . Interpersonal conflicts |
| 11 | Yes | Success | No | No | . Strong involvement of the Sve in the interaction . No ambiguity between trading relationship and supportive one |

4.2. Cross-case analysis: matrix of the main results

As Table 2 shows, there are four categories of results that were identified. These were (1) cases in which there were meetings between prospective Sve/Sed companies which did not lead to any supportive action; (2) cases in which supportive action was initiated with a trading relationship and which has subsequently failed; (3) cases in which a supportive action has been initiated with a trading relationship which are judged to have been a success; and (4) cases in which a supportive action succeeded without there being any trading relationship between the parties.

Table 3. Cross-case analysis: main results

| | | | |
|-----------------|---------|--------|--------|
| Dyads studied | Sve/Sed | Sve/ME | Sed/ME |
| Case categories | | | |

| | | | |
|---|---|--|---|
| No supportive action (NET, NOV, KEP) | Lack of involvement by the Sve. Negative assessment of the interaction by the Sve that claimed not to be able to provide the competence needed. Negative assessment of the interaction by the Sed because of the lack of Sve involvement | The Sve does not call into question the ME's involvement. The ME does not call into question the Sve's behaviour. | The Sed calls into question the ME's ability to identify convenient counterparts. The ME highlights the difficulties in identifying good counterparts. |
| Supportive action engaged, trading relationship, failure (AET, SCH) | The involvement of both counterparts in the interaction is strong at the beginning. Assessment is rapid in opportunistic terms. As soon as an element of conflict appears, the opportunist relationship takes over. | The Sve does not call into question the ME's involvement. The ME does not call into question the Sve's behaviour. | The Sed does not call into question the ME's investment in interaction. The ME highlights the difficulties in identifying good counterparts. |
| Supportive action engaged, trading relationship, success (VEL, AET, BGH, SUN) | The contribution of both partners intensifies over time. The cooperative dimension becomes secondary. | The Sve does not highlight the role of the ME in the success of the project. The ME emphasises its | The Sed places a secondary importance on the role of the MOE in the success of the project. The interaction is weak. The ME |
| | | Role in the success of the project. | Emphasises its role in the success of the |
| Supportive action engaged, no trading relationship, success (BOUL, NAI, NAT, other cases under way) | The investment in the interaction is decided a priori by the Sve. The evaluation of the interaction is positive on the part of the Sve if the support action succeeds. The interaction is deemed unbalanced by the Sed that believes benefiting more from the interaction than his partner. The Sed manifests the feeling of having a "moral debt" towards its partner. | The Sve express a desire to invest in the action of the ME. Interaction is perceived as having high moral value by both parties. | The Sed evaluates very positively the action of the ME. The feeling of "moral debt" towards the Sed translates into a desire for investment in interaction with the ME. |

5. Discussion

5.1. Key factors of success and failure

Two categories of supportive practices can be identified from the analysis, based on whether or not they are accompanied by the existence of trading relationships between the Sve and Sed. The key factors determining success and failure vary from one category to another.

- In supportive actions where a trading relationship exists (or is seen as possible) When trading relationships do exist, they were found to cover a range of situations:
 - the Sve transfers skills to the Sed, expecting in return an innovation transfer, for example, some applied research which it will use,
 - the Sve places orders with the Sed,
 - the Sve sells services to the Sed,
 - the Sve is planning to buy the Sed.

Factors leading to failure:

When cooperation does not take place, the Sve and ME generally explain this failure by pointing out the difficulty of finding a partner who has the competencies sought by the Sed. The Sed generally questions the Sve's lack of involvement and/or the inability of the ME to find the right partners. Issues of cognitive or organisational distance are also sometimes referred to by the Sed.

When cooperation does take place (see the example of NET), the existence of a trading relationship can sometimes lead to a failure of cooperation. Several causes of failure in these instances have been observed:

- disagreement between Sve and Sed on a partner's level of investment; the Sed judging Sve's investment insufficient in relation to its market expectations,
- the appearance of a financial or commercial conflict,
- the appearance of conflict linked to the reduction of commercial forecast initially defined,
- interpersonal conflicts,
- the balance of power in the research relationship leading to a break,
- the rivalry between Sve's R&D department and the Sed.

This situation is characterized by a divergence of motivations inherent in the reason as to why the actors are part of the network. The Sve expects support actions to be financially beneficial. Its interest is thus driven more by self-interest than by collective interest. Therefore, the interaction can fail because of economically egoistic behaviour of actors (Finke *et al.*, 2016). As these authors have previously pointed out, companies interacting in collaborative networks can tend to compete. In this situation, we note competition between the Sve's R&D department and the Sed's innovation activity (see example of NET).

Promoting factors:

When supportive actions do take place, the trading relationship can reinforce the initial cooperative relationship (see the example of VEL). The cooperative relationship can be facilitated by:

- the level of interest in the potential positive outcomes offered by the trading relationship,
- the cognitive proximity: for example individuals in contact come from the same scientific background,
- networks common to both companies: for example, the Sed had worked historically with a subsidiary or a strategic supplier of the Sve,
- personal links: some Sed executives have already worked in the Sve or one of its partners. They effectively form a network of individuals that support interaction between companies.

In contrast to the previous situation, the trading relationship reinforces here the interaction process. In this configuration, Sve and Sed share common interests based on economic rationality (Håkansson, 1982). In the absence of a collision of interest between the actors, the supportive action is not altered. The cognitive proximity, permitted by the common background and culture of individuals in interaction, seems to be another factor of explanation.

Both companies, Sves and Seds, attribute most of the reasons for success to themselves rather than the other party. Furthermore, the interaction of the Sve and the Sed with the ME remains low.

- In supportive actions in which there is no trading relationships expected by the Sve (see the example of NAI)

These cases were relatively infrequent in our research, with only 3 supportive actions observed out of 11, but in each case the collaborations were deemed to be a success. The intensity of the Sve's contribution to the interaction with the Sed and the ME is *decided a priori*. The Sve evaluate the interactions as satisfactory if the supportive action is carried out and is not dependent upon the subsequent trading relationship. The Sve leaders point to other reasons of their satisfaction:

- the occasion for them and their executives to solve new management issues and to enrich their experience by being in contact with other sectors of activity,
- the social utility and the wealth of human contacts,
- the indirect reinforcement of links with local public actors.

The contribution of the Sed in the interaction with the Sve is important. It is the Sed that initiates the implementation of the supportive interactions in making a request for assistance. The Sed emphasizes the existence of an imbalance in its favour in its relationship with the Sve. It considers the support received to be superior to the contribution it makes. The Sed leader feels that a debt is incurred to his partners. In all three cases studied, the managers of the assisted firms indicated that they wished in the future to be able to play the role of being the assisting company for the benefit of other local companies. Unlike the other cases studied, these situations are the only ones in which the managers of the companies assisted express strong appreciation of the role of the ME.

5.2. Network dynamics

- The impact of interaction assessments on supportive network dynamics

In cases where trading relationships exist, if the supportive project fails, the role of the MEs is called into question by the Sed. If the project is successful, there is little credit given to the MEs, and the Seds do not seek to participate in the development of a supportive network. Both situations do not facilitate change in the network, and tend to promote stagnation.

Conversely, when there is no trading relationship, the Seds express the feeling of having contracted a debt and wanting to reduce it by investing heavily in the development of the supportive network. The exchanges held with ME representatives confirm the Sed's willingness to take part in collective action (see the example of Naïo). In some regions, a number of assisted business leaders form a localised network in order to set up supportive mechanisms themselves. The level of "debt felt" becomes a driver of the network development through which MEs can grow locally and new businesses can be supported.

- Networks and differing perceptions of the rules of the game

The diverging perceptions of rules of the game can influence the way that actors interact with each other and become a major barrier to the implementation of collective action (Finke et al., 2016).

At the level of the network, the results of our study show that the network's rules of the game are not always explicitly known to the Sves, especially concerning the commercial and financial motivations of the interactions. The fact of finding out them once the cooperation has started may constitute a major obstacle to the success of the interaction.

- Incomplete network

The three supportive networks among companies are similar to partial meta-organizations (Ahrne & Brunsson, 2010). Indeed, they have no hierarchical authority. The MEs have no power. They play a role of animation and the actors are not ranked hierarchically. This results in decision-making by consensus. Monitoring and sanction systems remain weak in these organizations. The preponderance of soft law appears to be an inevitable consequence of this partial organizational structure. In these organizations, emphasis is placed on membership and voluntary guidelines.

At this stage of our research, it is difficult to say whether the incomplete nature of the networks observed is a brake on their dynamics. However reporting on the results of triads (Sve/Sed, Sve/ME, Sed/ME) seems weak and hinders the learning opportunities of the network.

6. Conclusion

This study was conducted to explore how actors embedded in supportive networks between companies interact and why these networks succeed or fail to support the development of entrepreneurial and SME activities. Two configurations of network success are revealed.

In the first configuration, the support action is driven by an altruistic behaviour of the Sve. It is shared by all individuals within the Sve who participate in the support action. Sve and Sed share collective interests common to the network: supporting the development of a company for one, acquiring from adapted learning for the other. The success of collective action promotes the dynamics of the network, the Seds, once the support action is over, choosing to invest in the network as Sve.

In the second configuration, the support action is driven by an economic self-interest that takes precedence over the collective interest and is shared by the Sed. The interaction takes place in a context of economic rationality without causing conflicts of interest. Resting on egoistic economic interests, the support action is a success at the level of the actors involved but does not enrich the dynamics of the network.

The failure of the support action is always the result of a collision of interests between the actors. These collisions appear at two different levels. These are either between the interacting companies, or else within the Sve, where the interest in collective action at the level of the management can diverge from the economic interest perceived at the level of individuals or departments involved in the support

action. Our study suggests that the diverging interests is the overarching reason why supportive action fails in these formal entrepreneurial networks.

Based on our results, we can make a number of recommendations at the level of the MEs and the Sves. First, in the event that a trading relationship exists, the ME should strengthen its “broker” role by helping Sve and Sed clarify their expectations. Its additional role would be to ensure that the respective interests of Sve and Sed for the interaction converge. In the event that a trading relationship is not envisaged, the role of broker is not to be strengthened.

Secondly, in all configurations, after the commencement of support action, the "facilitator" role of the network deserves to be enriched by a systematic feedback of support actions. In addition to the data reporting activity, feedback from Sves and Seds would facilitate the dynamics of the network by allowing the sharing of experiences and practices between the actors.

Our recommendations are also addressed to Sve’s decision-makers. Their adherence to the collective action of the network is not sufficient. It seems useful that all the departments of Sve share the same vision of the support action.

The main limitation of our work is that the findings are based on a single cultural context and cannot be generalised to similar supportive networks among companies outside of France. More comparative research should thus be conducted at European and international levels.

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