



**HAL**  
open science

# Regional Public Policy on the Use of ICT to Support Innovation and Growth: How Can Micro-Businesses and SMEs Be Supported Through Collaborative Initiatives in Clusters?

Martine Gadille, Karine Guiderdoni-Jourdain, Robert Tchobanian

## ► To cite this version:

Martine Gadille, Karine Guiderdoni-Jourdain, Robert Tchobanian. Regional Public Policy on the Use of ICT to Support Innovation and Growth: How Can Micro-Businesses and SMEs Be Supported Through Collaborative Initiatives in Clusters?. Christa Larsen, Jenny Kipper, Alfons Schmid, Marco Ricceri. The importance of SMEs as Innovators of Sustainable Inclusive Employment, Rainer Hampp Verlag, pp.103-128, 2020, 978-3-95710-380-2. hal-03102580

**HAL Id: hal-03102580**

**<https://hal.science/hal-03102580>**

Submitted on 7 Jan 2021

**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.

Copyright

# Regional Public Policy on the Use of ICT to Support Innovation and Growth: How Can Micro-Businesses and SMEs Be Supported Through Collaborative Initiatives in Clusters?

*Martine Gadille, Karine Guiderdoni-Jourdain and Robert Tchobanian*

## Introduction

In the early 2000s, at a time when the French national government was implementing a policy of developing selective competitiveness hubs to support regional communities of micro-businesses and small and medium-sized enterprises (SMEs), some Regional Councils embarked upon more regional development policies, inspired by the concept of “clusters” to support small businesses. The aim was for business associations to scale up their collaborative initiatives to the regional level as a means of driving economic development and innovation in the broadest sense. A regional cluster development policy was implemented in the Provence–Alpes–Côte d’Azur (PACA) region beginning in 2006, just as it had been in the Rhône Alpes region in the early 2000s. In the PACA region, the policy first involved issuing a request for proposals (RFP) to establish Community Economic Development Hubs (Pôles de développement économique solidaire, PRIDES) to be submitted by groups of businesses with similar economic circumstances and aims. In the case of PACA, “the size of the region’s enterprises, which are smaller than the national average, can limit their development. One key aim is therefore to help them form networks [...] while improving their overall performance” (Région Provence–Alpes–Côte d’Azur 2007: 50). With financial support, these business groups would be tasked with activating five levers under the aegis of their strategic roadmaps: innovation, international activity, corporate social responsibility, staff training, and information and communication technologies (ICT). While the responsibility for the first four levers belongs to the region’s economic leaders, this chapter focuses on the fifth component – ICT – which belongs to a cross-functional “Digital Innovation and Economy” department within the Regional Council. This department is specifically tasked with planning and leading the work of the other depart-

ments (economy, innovation, and research) through the allocation and distribution of ICT. It is also responsible for managing RFPs for the implementation of the ICT lever in the development of the clusters. However, it comes under a double strain: it has to overcome the digital divide that affects some SMEs and, at the same time, help implement networks and tools across shared business development strategies. While the issue of the digital divide between different types of enterprise often falls into the remit of the Chambers of Commerce and Industry (CCIs), with some regional support, in this case the region is trying to position itself as a leader through its financial support for digital innovation.

The purpose of this chapter is to study how these business associations respond to policies promoting the pooling of services, resources, and tools through the adoption of ICT.

From a theoretical point of view, we draw on the concept of the meta-organisation to analyse how public–private policies promoting economic development and innovation impact micro-businesses and SMEs. This concept, which is broader than that of the cluster (Martin and Sunley 2003, Porter 1998), enables us to consider the dynamic relationship between the practice of grouping businesses into local networks and policies that promote the construction of new geographical districts for network members. In light of both the rationale for networks's decisions to grant financial support and the way contracting processes work, there is a need to clarify and renegotiate the rules (Ganne 2000) governing the distribution of resources, and especially intellectual resources (Pecqueur 2007), with regard to market access. For our purposes, a meta-organisation is defined as a structure whose members are not individuals but organisations (Arhne and Brunsson 2004). In this respect, it has a transforming effect on a fragile environment because its own leadership, rather than that of the government, is what shapes its members's practices (Berkowitz and Dumez 2015, Dumez 2008, Gadille, Tremblay and Vion 2013). We focus on meta-organisations at the subnational level, with regional governance and implementation at the heart of our analysis. There are parallels between that regional governance and the role of intermediaries in the economic development of regions (Cooke and Morgan 1998, Scott 1998). More recently, the new economic landscape has called for a review of the regional clusters policy and the adoption of a multi-level governance model that regulates commercial and non-commercial rela-

tions between the different regional and external stakeholders. This region-specific approach to innovation would be based on sectoral diversification, international openness and a high level of diversity among stakeholders to reduce the risks associated with lock-in effects and self-referential behaviours (Cappellin 2010, 2017). However, organisations of organisations are not designed to be tools for improving our understanding of the relationship between new types of region-specific government policies and the construction of collective identities through business associations.

To answer our research question, we adopt a qualitative method that focuses on the analysis of three structurally different PRIDES: Culture Industries and Heritage, Business Tourism and Care Services.<sup>1</sup> Despite the differences in their activities, the distinguishing feature of these types of cluster is that they have regional groups and administrative bodies as clients, suppliers, and trustees.

After outlining our theoretical framework and methodology, we introduce the regional policy of the PRIDES as well as the geographical boundaries of each cluster. We then analyse how each meta-organisation has made use of the public incentives for innovation and development through the use of ICT. We conclude with a discussion on the relevance and limits of public policy with regard to the geographical boundaries of these very diverse business groupings, all of which include a significant number of SMEs.

## Theoretical Framework

This section begins with a presentation of the theoretical and empirical approaches which, based on an understanding of organisational theory and industrial sociology, examine the relationship between the ways in which SMEs are involved in the social division of labour, and how resources and technologies are created and distributed within the environment through collaborative initiatives. This theoretical prism is complemented by research approaches that are more firmly rooted in economic geography and analyse the more territorial dynamics of businesses and how these dynamics lead enterprises to pool their assets to create new resources.

---

<sup>1</sup> The results presented are the fruit of a research project conducted by the authors, entitled “ICT-SME-CLUSTERS” and funded by the PACA region.

## **SMEs in Regional Economies: Between Domination and Emancipation as a Result of Collaborative Initiatives**

The independence of SME owners in France has been a focus of research for many years. For example, on the subject of action by business owners during the institutionalisation of the cross-sector social conflicts (led at the start of the 1970s by the National Council of French Employers (Conseil national du patronat français, CNPF)), Bunel and Saglio note that business owners with fewer than 100 employees<sup>2</sup> within the metropolitan areas of Saint-Etienne, Roanne, and Lyon wanted to steer clear of any collective action involving business owners and free to make decisions about their businesses unilaterally without the need to enter into any kind of bargaining (Bunel and Saglio 1979). According to Sellier (1984), the structural origin of this split within the world of business owners is the way in which larger businesses have developed in France, namely with excessive and economically detrimental technical engineering, bureaucratic organisational structures, and slow-moving consumer markets. By contrast, the work of SMEs is based upon the principles and practices of private reasoning (Sellier 1984). Indeed, in the second half of the twentieth century, any collective action led by SME owners tended to be characterised by urgent interventions in local production systems, that is in crisis situations, rather than by creative collaborative activity (Raveyre and Saglio 1984, Saglio 1991).

The creation of industrial districts has been an exception to the rule in French industry for a long time, despite policy around local production systems (systèmes productifs locaux, SPLs). The industrial districts used as a benchmark for the concept of clusters and related policies are given as a social and economic whole: their success is dependent on social and administrative aspects that go far beyond purely economic factors (Bagnasco, Sabel and Brusco 1994, Pyke and Sengenberger 1990) so they need to be considered in the context of global socio-economic changes (Piore and Sabel 1984). In Italy, the traditional approach based on industrial districts suggests that they may have been the driving force behind the economic changes in the north of the country from the 1970s to the 1990s thanks to the specificities of the geopolitical and economic context, the social makeup of the entrepreneurs and the subculture prevailing in the spheres of politics, technology, and markets (Sabel 1994, Segreto 2006). In France, such structures are much rarer and have not always survived globalisation. In the case

---

<sup>2</sup> Taken from a sample of over 50 employees.

of France, however, Hancké (1998) pushes for an overarching strategy to improve the quality of French SMEs in the different regions based on vertical relationships with major contractors. Courault (2000) also argues that industrial districts should not be compared with French industrial systems that have a high proportion of SMEs. In the case of Choletais, a kind of industrial district for French textiles and apparel, Courault (2005) highlights its globalisation as an example of a successful strategic refocusing of SMEs. These enterprises now focus less on production and more on distribution, thereby requiring manufacturers to constantly update their offering. He concludes that this is a historically significant approach to economic development because, though rooted in tradition, it has survived in ways that largely ran counter to the dominant forms elsewhere in France (Courault 2006).

### **The New Geographical Boundaries of Business Networks**

The emergence of external economies of scale, with waves of international companies setting up operations and an increasingly educated working population, has transformed regional SME communities through swarming processes, often as a result of social plans (Garnier and Zimmermann 2006). At the same time, more spontaneous entrepreneurial activities have been undertaken by people with strong technical skills. These practices can be found within the newer types of SMEs that began to emerge during the crisis, whose leaders have been geographically mobile and are reasonably well educated (Ardenti and Vrain 2000). These leaders can rely not only upon horizontal networks between local SMEs but also on ones that transcend local boundaries (Raveyre 2005). Ganne thus refers to new geographical districts being established within the framework of globalisation: “for these SMEs, bringing all of their operations in house is less important than establishing themselves as members of dynamic specialised networks” (Ganne 2000: 70). These developments have made people reflect on these new types of public policy and question the logic of planning that is centred on redistribution and equity in order to ensure that each geographical district is designed to take advantage of and exploit its distinctive advantages (Ganne 2000: 72). The policy of clusters can be analysed from this point of view, whether it be a national policy (for example competitiveness clusters and business clusters) or a regional one (for example regional clusters, such as the PRIDES in the PACA region). According to the original definition, a cluster is a network that emerges in a specific geographical area, which may be on a number of different

scales. The enterprises and institutions in these networks share close links, common concerns and an element of complementarity, leading to frequent and beneficial interaction between them (Porter 1998: 226). For many authors, however, the concept remains too generic and unclear (Martin and Sunley 2003) and is not exhaustive enough to provide a suitable basis for decisions on government policy (Perry 1999). Bearing that in mind, we would argue that the concept of the meta-organisation is a valuable device. This type of organisation makes use of employer–employee relationships to plan and implement projects, using public and private funding, and not without tension or conflict, to influence the rules and working environments to which the stakeholders are subject (Arhne and Bruns-son 2004, Berkowitz and Dumez 2015, Dumez 2008, Gadille, Tremblay and Vion 2013).

On the one hand, this concept makes it easier to identify the formal governance of a cluster, including both collaborative and subcontracted projects, along with the rationale for using public funds to try to promote the distinguishing features of the geographic zone. On the other hand, subnational meta-organisations belong to the wider industrial and professional structures through which stakeholders and other organisations interact, both locally and beyond.

The political representation of the meta-organisation as a stakeholder in the governance of a regional cluster, whether supported through public policy or on a more spontaneous basis, would therefore be reflected in the establishment of fora in which collaboration could be promoted and owners of micro-businesses and SMEs could work on their collective identities. This local but globally influenced confrontation between the rationales for reproducing or reconfiguring collaborative identities of micro-businesses and SMEs would lead to a part-restructuring of their division of labour. Whatever the scale of these changes, we would assume that, through the pooling of resources, these businesses's access to risk-sharing would still be closely related to their own involvement with different industrial organisations within their region or subregion (Gadille and Pélissier 2009). The results of our research on the use of ICT in SMEs reveal that, in order to be understood and applied, the adoption process needs to be integrated into targeted approaches that are both differentiated and specific to SMEs. These approaches form part of a continuum that ranges from subcontractor SMEs that do not even have a say in their internal processes to SMEs that have the freedom and autonomy to pick and choose which contracts they take on

(Gadille and d'Iribarne 2000). Amabile and Gadille (2003) have shown that ICT adoption strategies within SMEs need to be seen in the context of the exploration and exploitation processes within their own organisations. These are partly determined by their strategic and even identity-based decisions on their degree of autonomy in vertical relationships. Finally, the use of ICT within SMEs is evolving not only alongside the emergence of more collaborative business models, but also through partnerships with trusted third parties when adopting more sophisticated e-business solutions (Brown and Lockett 2004).

The concept of the meta-organisation therefore provides a deeper understanding of how groups of SMEs choose whether or not to take advantage of opportunities to develop and use ICT to improve their operating environments, taking into account the governance and operational services with which they have been formally equipped. In our case, the PRIDES meta-organisation needs to try to balance the requirements of public policy with the different strategies and collective identities that existed beforehand, which led to their being approved as hubs (Gadille, Méhaut and Courault 2013). While the ICT innovation and adoption strategies in each of these hubs indicate the presence of existing collective identities, using public policy to harness the ICT lever could also provide an opportunity to enhance these collective identities. Collective identities are both the focus and potential outcome of a "transaction or negotiation" between social groups and institutions, or between social groups themselves (Wittorski 2008). At the same time, the sociology of entrepreneurs is focused on their companies' intensive use of local resources and on aligning their companies to local social regulations (Zalio 2004). The territoriality of these entrepreneurs can therefore be defined as the process through which they form a social and professional identity in relation to a specific geographical context (Zalio 2004). In our view, this context can be defined, on the one hand, by the characteristics of the productive systems to which the member enterprises belong (the value chains, sectors and any social and/or economic anchoring locally), and by the nature of the public policy (local, regional, and/or national) that is being implemented by the businesses themselves (Andreff 1996, Michun 2011). Moreover, the geographical identity of any social group implies the ownership and delimitation of a given space within the context of the increasingly complex organisation of social activities and relations (Crevoisier 2001, Savey 1994). Indeed, the meta-organisation is an indicator of this "territoriality" in that, together, the administrative and operational functions are supposed to promote improvements in the collaborative



and autonomous capacities of the organised collective (Leys and Joffre 2014). It is therefore important to use qualitative, “bottom-up” approaches to obtain a better understanding of the operational behaviours at the interface between more flexible public requirements and private initiatives taken by businesses.

## Research Methodology

Due to the investigative nature of our research on ICT among SMEs, we adopted a qualitative approach. Our research focused on five clusters, all of which were selected to be part of the PRIDES economic policy in the PACA region. Since two of the PRIDES studied are also competitiveness clusters, we focus here on the other three: the Care Services hub (Pôle service à la personne, PSP), the Cultural Industry and Heritage hub (Pôle industries culturelles et patrimoines, ICP), and the Business Tourism hub known as “Provence Côte d’Azur Events” (PCE). We conducted a series of semi-structured interviews (26 in total) and extensive analysis of documentary sources. Across the three clusters, 16 people were interviewed. These included civil servants from the administrative structures of the PRIDES, as well as individuals representing the member businesses and associations. As some of the latter are also members of boards of directors or other governance bodies, the data from those interviewed provided information on both the ICT policy and activities of their PRIDES clusters (in particular the services and provisions for member organisations) and on the expectations and uses of ICT by the member organisations themselves (micro-businesses and SMEs in particular). The interviews were conducted using two guides, one focusing on SMEs within the PRIDES and the other on hub administration.

The SMEs were asked about the perceived usefulness of ICT within their sector, the different tools used, ICT-related needs and the role played by the PRIDES in both analysing their ICT needs and the provisions being made to support their adoption of digital tools. Meanwhile, the leaders of the PRIDES (those running them, as well as the business leaders who were directly helping to set their objectives) were questioned about the role of ICT within the policy and strategies of the PRIDES, descriptions of the needs of member organisations, strategies for increasing ICT usage, specific activities proposed and evaluations of their implementation, and activities already being carried out, along with their results. The

data collected were coded based on the categories in the interview guides and collectively analysed by the research team.

### **The Geographical Scope of the Hubs Before the PRIDES Policy**

By analysing the geographical scope of these regional clusters, we can obtain a better understanding of the relationship between the administrations of the PRIDES, which are non-profit associations under French law, and the member micro-businesses and SMEs, that contribute to stakeholder activities to support the value chains targeted by the clusters's administrations. Our ultimate objective is to better understand how incentives for ICT adoption are implemented, and the roles of micro-businesses and SMEs as both stakeholders within, and beneficiaries of, the collaborative initiatives of the PRIDES.

#### *The ICP PRIDES*

The ICP hub was created and given PRIDES status in 2007. In 2010, it was also designated a "business cluster" as part of a new policy introduced by the Delegation for Regional Development and Policy (Délégation à l'aménagement du territoire et à l'action régionale, DATAR) to support SMEs within regional communities. However, the hub has also been strongly influenced by two earlier types of collective organisation. Firstly, as with all PRIDES, the ICP's sphere of activity could potentially cover the whole of the PACA region. However, it has a special relationship with the Arles area, and in particular with its CCIs. In 2012, over 40 per cent of the member organisations were established in this area (this rises to 60 per cent if we include the Bouches du Rhône area). It is this local aspect of being part of a geographical zone which strongly influences the relationship between the member organisations, the hub, and its administration. Secondly, because of relations previously established with universities and research laboratories, the hub's application for PRIDES status only materialised following the termination of an earlier plan to become a competitiveness hub focused on research and development (R&D) and innovation in the sectors covered by the hub. This background, along with the resources available for collaborative initiatives, led the ICP PRIDES to have a complex perimeter which is reflected in the identities of its stakeholders, the scope of its spheres of operation, and the structure and activities of its administration. This sectoral diversity strengthens the importance of the original geographical focus for the boundaries of the cluster.

Among the companies and associations in the hub, staff sizes are generally small (the ideal type of member for the hub, at least for businesses, is the micro-business). With regard to resources (ICT or otherwise), this naturally leads to a relationship between member organisations, with the hub functioning as a resource centre. The technology and expertise held by many of these micro-businesses also drives them towards collaborative arrangements between group members in tender bids, R&D projects, and shared technology- or information-based platforms. The hub therefore plays an engineering role which supports these collaborative arrangements and solutions. At first glance, then, the ICP PRIDES lies somewhere between a structure like the CCI as a small business resource centre and a competitiveness hub, a hub for collaborative technological and/or innovative projects.

This complex identity is reflected in the spheres of activity of the member organisations. Within the heritage sector, three subsectors can be identified: natural heritage, manmade heritage, and cultural planning and outreach. Around these three areas, there are businesses, associations, and research and training organisations, as well as institutional stakeholders. It is therefore not so much a question of activating value chains within one or more sectors (as these would ideally go from R&D to distribution, via a marketing process), but rather the intervention of a set of stakeholders in the cultural or digital promotion of a given area, regardless of whether it involves technological, environmental, or cultural dimensions. One important objective of the hub is to create and maintain jobs directly or indirectly linked to these activities, and this has particularly been the case in the Arles region. More broadly, it is a question of developing collective engineering for this purpose, in which the PRIDES is responsible for both coordination and implementation.

#### *The “Care Services” (PSP) PRIDES*

The Care Services PRIDES (Pôle service à la personne, PSP) was created in January 2007 to bring together a significant number of third-sector organisations, and also private-sector companies operating within the social solidarity economy, in a network to increase and broaden their offerings, visibility and service quality, and improve their employees’ training and prospects. In 2010, third-sector organisations (77 per cent) and private-sector companies (33 per cent) accounted for almost half of paid employment among the certified providers of the various

social support services, from “comfort-related” services for households to children’s services and assistance to vulnerable persons. At the beginning of 2011, the hub was also designated a “business cluster” in recognition of its support for regional networks of SMEs in the same sectors. More recently, in February 2017 when its PRIDES and “business cluster” initiatives were over, the hub signed a contract to be a national “care services” provider and extended the scope of its services to include health.

The PSP PRIDES in the PACA region was formed on the initiative of stakeholders and stakeholder associations from the care sector: those working in personal assistance and at-home care, departmental platforms, stakeholder associations, and groups of stakeholders from the social solidarity economy in the PACA region. The aim, according to the initial objectives, was to establish a supply chain model in the care sector (which is growing rapidly, for various reasons) that would be based on quality of service (either quality- or accreditation-based) as well as proactive human resources (HR) policies (skills, training, and social dialogue) in order to pursue objectives around social responsibility. This model, which relies on organised and licensed providers, differs from those based on direct employment of staff by individuals in need of care.

There is a geographical element to this hub, but the hub is made up of different types of stakeholders who are also part of other communities, locally and regionally, who share similar types of problems (as highlighted in the chapter by Julien Maisonnasse in this book). What is most important here, therefore, is the sector-specific aspect, even if public policy deals with it at the regional level.

### *The PCE PRIDES*

The PCE PRIDES specialises in business tourism in the PACA region and was created in December 2007. It was formed on the initiative of four stakeholders: the Regional Chambers of Commerce and Industry (Chambres régionales de commerce et d’industrie) for the PACA region, the Regional Committee for Tourism (Comité régional de tourisme, CRT) for Riviera Côte d’Azur, the CRT for Provence–Alpes–Côte d’Azur, and Provence Méditerranée Congrès (PMC)<sup>3</sup>, an association of 11 cities promoting their convention centres. The two CRTs bring together public stakeholders, such as the CCI, General Council and Regional

---

<sup>3</sup> Aix-en-Provence, Ajaccio, Arles, Aubagne, Avignon, Hyères-les-Palmiers, La Grande Motte, Mandelieu-La Napoule, Marseille, Saint-Raphael and Toulon.

Council, who subsidise and share the geographical area with them. Their objectives are to promote the region, generate tourism, and provide oversight and monitoring. For the PMC, which led the response to the PRIDES RFP, the strategic priority was essentially to develop the market for convention centre operators throughout the region, as well as the development of quality accommodation and seminar rooms for business tourism by extending capacity to host events for groups of up to 300 people, all of which would require an innovative and shared approach to marketing, based on the studies carried out. The leaders of the broadened PCE PRIDES therefore expanded its scope following a recommendation by the administration of the PMC, which was a founding member of the PRIDES. It led the integration of the two subregional convention centre associations (one in the east and the other in the west of the region) into a single association at the regional level. To broaden this network, the PRIDES system encouraged other stakeholders within the “business tourism” sector to join, including incoming tour operators and hotels, all of whom meet quality specifications.

The PRIDES also includes various subcontractors, partners, and corporate sponsors among its members, such as stand and furniture rental companies, sound and lighting companies, specialist and niche caterers, and specialist couriers. These are all niches that are occupied by SMEs and micro-businesses across both regions; membership would represent a significant cost that they may not necessarily be prepared to pay. The micro-businesses and SMEs in the value chain are represented in the strategic decision-making processes of the PRIDES in the form of a panel on the board of directors. However, the representatives of the convention centres and their institutional partners (CRTs, international development agencies and hotel industry federations) are still in the majority.

### **Hub-Based Collaborative Initiatives in Innovation and ICT**

For over 20 years, public authorities at both the local and national levels have sought to encourage SMEs to adopt ICT and to use it innovatively and effectively, based on two implicit assumptions: the fear of a “digital divide” which would be detrimental to smaller businesses, and the hope that ICT, if adopted, would provide a strong boost to business development. A number of national and regional observatories and public support schemes for the adoption and use of ICT have been set up. The PRIDES have therefore emerged as logical places for such policies to be effectively deployed. They are a conduit for this policy, which they roll

out to their member organisations and at the same time adapt to the characteristics and specific needs of the cluster. This locally relevant and, in principle, collaborative approach to deployment was one of the objectives of the PRIDES.

However, the resource centre teams realised fairly quickly that this policy was not always being properly implemented across all the PRIDES. This is why a specific RFP was launched with the aim of “supporting PRIDES and their SMEs with the adoption of ICT within their development strategies and activities”<sup>4</sup>, in order to encourage their initiatives. The description in this RFP exemplifies the type of activity encouraged by the regional public authorities. This comprises two related elements. Firstly, the first objective for the administration of any PRIDES is defining its ICT strategy, taking into account the current situation facing businesses in the cluster. Secondly, this strategy must then be deployed through collaborative initiatives among SMEs (through awareness raising and action plans).

However, the issue of ICT adoption by SMEs cannot be addressed from just one angle. Even if it is primarily dependent upon the capacities of a given organisation to make use of these tools, it also depends greatly on the economic context (in particular the lines of work or sectors) in which these SMEs operate, as well as on the shared support structures (clusters, professional associations, consultants and stakeholders, and policies).

An analysis of business practices among each of the three PRIDES under study revealed differences arising from the specific characteristics each case, but it also illustrated the sometimes-limited scope of institutional policies to support the adoption of ICT by SMEs and micro-businesses.

#### *Innovation and ICT in the ICP PRIDES*

This cluster appears to be made up mainly of micro-businesses, something which is characterised by its retention of a very local focus (the Arles region) with institutions and business networks that have existed for a long time. However, it is also characterised by its desire to promote collaborative innovation strategies, especially when it comes to joint tender bids or R&D projects. The role of ICT within the initiatives promoted by the administration of the PRIDES also reflects this diversity.

---

<sup>4</sup> Interview with a convention centre director, June 2011.

First, the shift towards a more CCI-style resource centre, targeted at micro-businesses, has led to a largely top-down offering aimed at a network that is itself made up of multiple micro-businesses.

The PRIDES introduced a regularly updated website to keep its member organisations updated on its activities. This website provides a range of business, social and technical news to the organisations within the hub. A collaborative platform was also announced with a General Education Diploma and collaborative tools for projects that involve several companies in the hub, something which had not been available before.

In terms of ICT, this can be seen most clearly in the initiatives of the Arles CCIs as reported on the website. The aim of these initiatives, which are not exclusive to member organisations within the hub, is to present customised digital tools at events that are open to members of the PRIDES. Once again, the CCI's ICT-related actions rarely come in response to requests. The offering is largely "top down" in nature. The plan was for this offering to be expanded through "Compétitic". This tool was set up regionally by the CCIs, the Regional Council and the government to give small businesses a better understanding of the wide range of ICT tools and applications available to them, which linked into their economic and management environment and the skills available in the region to help them set up their business.

Then, in parallel with this supply strategy, which focuses on the specific needs of different micro-businesses, the PRIDES seeks to promote innovation through collaborative initiatives between several members of the cluster.

The website keeps track of new RFPs and offers project engineering support. There is also a list of members called the "skills matrix". This list of businesses originally included a shared space for setting up projects, which enabled several enterprises with complementary skills to join forces. This matrix has since become just a list of the hub members. In reality, as we have seen, the types of collaborative engagement that the hub wants to promote often seem to require active intervention by the administration in order to help set them up.

Similarly, a project for a collaborative platform for heritage conservation and development has led to the creation of a business centre with coworking spaces for digital nomads, complete with access to shared equipment and a digital ecosystem. The region has dubbed this platform the "living PACA lab".

This strategy of collaborative initiatives and pooling of resources seems to be one of the hallmarks of PRIDES's help for SMEs.

However, it must also take into account the diversity within the different sectors that make it up. This leads to the question of how the PRIDES was able to help a cultural association organising a festival around Mediterranean cultures. This type of festival requires a lot of advance preparation in terms of organisation (selecting artists, negotiating with agents, scheduling, multiple channels of communication, managing bookings). This is followed by logistical organisation during the festival (welcoming artists and ticket management), and then finally there is the post-festival follow-up (managing and updating customer records). The use of ICT can transform the way in which such a festival is organised and managed, and streamlining the entire affair. Could the PRIDES help develop an app for all this, even though it would only be relevant to a small number of organisations within the cluster? The group ultimately decided to work with four other festival organisers outside the regional scope of the PRIDES to develop the app. In this situation, as has occurred with other clusters, there were more business needs in common with other SMEs throughout the country than with those in the local cluster. Collaborative initiatives, such as the development of apps, are therefore planned outside of the scope of the hub's administration.

The fact that the ICP PRIDES is largely established in a region like Arles means that the number of collaborative ICT-based initiatives that it can lead is limited, despite the fact that it covers various value chains. By contrast, in the area of awareness-raising initiatives and support for the adoption of generic "Compétitic"-type ICT tools, the hub's offering is more in line with the needs of the member micro-businesses. Collaborative platform initiatives therefore make it possible to align the geographical scope of PRIDES members and their specific skills with a view to generating greater synergies between them.

#### *Innovation and ICT in the PSP PRIDES*

In this PRIDES's member businesses, office-based staff managing at-home carers serving a range of end users make extensive use of digital tools in their work. For these staff, therefore, it is not the weakness of ICT tools that is an issue, but the way in which they are used.

Interviews with four business owners in this sector confirm the crucial role of ICT for both the assignment and monitoring of resources, as well as to inform performance indicators. They are therefore equipped with tools for this purpose.



However, they encounter two limitations on use: one is financial constraints (linked in part to the “stop-and-start” of government policies), which restrict the level of provision, and the other is the multiplicity of the various regulatory bodies (and funders), which leads to a proliferation of tools and costs involved. This makes the management of these resources more complex, and makes their own oversight difficult.

The PSP PRIDES’s response to these business needs led to the creation of a website, including an intranet section for the administration and member organisations, and also e-mail newsletters.

The PRIDES also conducted a collective audit of its member organisations on their ICT uses and needs.

Finally, focusing on one service sector, the PRIDES expressed its interest in the emerging use cases of ICT at the very heart of this service, and in particular on the digital tools which facilitate care provision. It wanted to play a role in monitoring technologies and help with service innovation.

The ICT audit and management support from the PRIDES confirmed that ICT, which is needed to improve quality of service and the management of fixed costs, is often restricted by constraints imposed upon them by the funding providers. The costs of these uncoordinated external constraints limit their ability to invest in ICT tools that could directly support operational and management objectives within care organisations.

To respond to this at least in part, the PRIDES carried out a joint initiative with eight test enterprises to design and build a web-based management audit platform capable of meeting three sets of needs: those of managers striving to better understand their management environment, those of auditors or inspectors categorising the data to be taken into account, and those of developers when designing and building the tool. In addition, the project had to be able to integrate with business software already on the market to make it as user-friendly as possible. This web-based management spreadsheet had three objectives:

- To provide the subscriber businesses with a data repository that could rank their performance indicators, irrespective of the multitude of third-party payment systems. The aim was therefore to base the organisation of services on informed decisions (with actual costs), with each member

having access to the strategic management data through the online service.

- To use this individualised (but anonymised) data for benchmarking purposes in order to find out the best (management) practices for a given service. Each organisation using the platform could therefore benchmark itself and discover solutions to help it improve its management environment.
- To offer an online service for managers with self-assisted learning in the form of practical online case studies on management challenges and suggested solutions. The idea was to grow the repository and develop a common narrative based on a shared pool of knowledge.

The design of this online tool was made possible because a major management issue arose among the organisations, and the hub's offer of support around these issues created an opportunity to standardise the audit approach that it was already conducting. However, this is still largely a "top-down" approach, and so its success depends on how well it is received by the SMEs that it is designed for. The tool was finally put online for member organisations of the PRIDES at the beginning of 2012, but it no longer seems to be part of the services offered by the hub today.

At the time of the survey, the expectations of the SMEs who were questioned regarding such a tool remained fairly low. Similarly, operational staff within the hub found that the website, and in particular the intranet part, was used less widely than they would have liked. In terms of initiatives to promote ICT-based knowledge and tools, it seemed that the hub took a very proactive approach that was in line with the ICT policy proposed by the region, but the organisations were more passive in their response, due to the importance of the issues that they had to deal with in their daily work.

#### *Innovation and ICT in the PCE PRIDES*

Takeup of ICT in the PCE PRIDES was essentially achieved through the design and implementation of a website platform with apps hosted by the key business stakeholders within the region. These shared apps could be divided into two categories: client services management and the production/sharing of marketing and business knowledge:

First, the front office function within the PRIDES is centralised. This approach is understandable, as 99 per cent of quotations are tailored to individual clients and require both adherence to agreed fees and a response within 48 hours. A contact function makes it possible for prospective clients to leave their contact details and specifications, along with their “type of venue”, so that the provider could get in touch. After this initial communication via the website, e-mail, and telephone would then be the main means of communication with the service provider, allowing prospective clients to clarify their specifications, along with the negotiable and non-negotiable elements of the brief. The PRIDES does not directly position itself as a provider with a complete range of products and services, as these providers already exist. It is more concerned with generating initial proposals and quotes.

Second, access to formal and informal knowledge is pooled to support the strategic repositioning of the region’s business tourism offering: market observations initially fielded by one of the two CRTs are made available to all members of the PRIDES. This includes providing statistical data based on both an exhaustive survey of the region’s conference centres and on a survey carried out by ATOUT France and France Congrès of their members within the PACA region (Aix-en-Provence, Antibes, Cannes, Marseille, Nice, and Saint-Raphaël), as well as research on the hotel and seminar industry. The aim is to evaluate the social and economic impacts of conference / event activities, to carry out an annual review of the offering of conference centres and seminar hotels, to measure footfall at their premises, and to follow up with clients and ensure their satisfaction. The results of the CRTs’s studies (for example on conference delegates’s spending) are also made available. The PRIDES therefore acts as an intermediary in disseminating information to its members and, more generally, to stakeholders visiting the site. In addition, the home page announcements of business tourism events (trade fairs, fairs, roundtables et cetera) in the region or further afield for members. The PRIDES manages the administrative side of registration centrally.

Beyond this platform, the offer of designing and equipping SMEs with digital tools does not appear to be one of the strategic areas to be developed for the cluster within the PRIDES administration. The education and training initiative implemented by the CCI for micro-businesses and SMEs, which is available on the website, is considered sufficient. There are two reasons for this:

- Given the membership requirements to join the PRIDES, there is a relatively high and sophisticated level of ICT adoption by most board members and the members of high-end hotels and international incoming tour operators. Some hotels are even developing smartphone apps, and the same applies to convention centres, with variations of websites that are accessible via Facebook and social networks. In addition, the creation of digital innovation groups by some major hotels is seen more as a search for differentiating commercial advantages, in which the PRIDES does not need to intervene. There is a fear of colliding with the rationales of companies to compete within the PRIDES itself.
- The interviews revealed that not many smaller subcontractors were involved in this; these companies used Doodle to coordinate their activities. At the same time, the administration of the PRIDES was aware that the 2015 hotel regulations might cause many small hotels (which do not form part of the current target) to close, with only the large or smaller character properties remaining.

The only other potentially relevant development in terms of digital services was the provision of a comprehensive overview of regional suppliers in database form. Initial quotes are prepared manually by staff who spend anywhere between a half day and a full day a month updating their service offering: they update their destination-specific rates as well as the names of the service providers that are associated with each conference centre. The various service providers are not all organised to generate and feed this supply of information into an internally shared database (for example price and product changes, et cetera). In the PMC, updating the database for each destination “would keep a full-time employee busy all year, more or less, for just eleven conference centre venues”<sup>5</sup>, but it seems difficult to imagine that this resource could be maintained without further financial support, given that the cluster has now been extended across the region by the PRIDES system.

Ultimately, the PCE PRIDES, including its member organisations, does not think of itself as an integrative body. It can give out initial quotes and to put people in touch with the right person, depending on the prospective project’s specifications. ICT does not have a significant role to play in these activities, and the adoption of ICT by micro-businesses and SMEs in the events industry is not considered

---

<sup>5</sup> Interview with a convention centre director, June 2011.

a priority. Thus, differences still remain between the operating processes of large hotels and event agencies and the more bespoke methods of a broad range of SMEs, as well as the processes employed by small groups of around three providers working in collaboration within a local area (for social and sports events).

## Discussion

The cluster policy, as defined in the PACA Regional Economic Development Plan (Schéma Régional de Développement Économique) under the National–Regional and European Community Plan (Plan Etat-Région et Communauté Européenne), was designed to support the growth of SMEs, even though they were not the focus of the policy on competitiveness hubs. By consolidating collaborative initiatives that were already being carried out by associations elsewhere, the region attempted to bring about structural change to foster innovation in the broadest sense (HR, ICT, marketing, organisational, et cetera) within SMEs communities that were chosen strategically for the benefit of the regional economy.

By dint of the five levers that the PRIDES had to activate to improve the economic and social performance of their members, in particular micro-businesses and SMEs, the regional authorities identified an overall issue relating to the economic development of the region, of which ICT was only one component. In some ways, ICT can even appear to be quite a technical resource compared to other more general levers such as innovation, skills, or opening up to external markets. However, by focusing on tools and making efficient use of them to tackle ongoing challenges, and on intellectually upskilling individual and collective stakeholders, this lever represented a key focus of public policy.

The administrations of the PRIDES, studied through the prism of their meta-organisations, generally sought to roll out strategies for how to achieve these objectives through internet/intranet sites, platforms adapted to their sectors, awareness-raising or training meetings, presentations of “off-the-shelf” tools, and incentives to engage in collaborative initiatives. But they also often found that supply outstripped demand, with SMEs seeking solutions to problems or needs which did not necessarily fit into the strategy of the meta-organisation or the overall strategy of the region. In 2011, the regional observatory of the information economy in the PACA region (ObTIC) drew up a comparative assessment of the use of ICT by all SMEs in the region (ObTIC 2011: 27). While technological

equipment (computers) and software (office, management, internet, and messaging) were both widespread, other digital functionalities such as the existence of a website, customer relations, product management, collaborative tools, and digitised data management lagged behind. These observations are also undoubtedly true for all the micro-businesses and SMEs within the three clusters studied here. The aim of having PRIDES administrations activate an ICT lever was to reduce the extent to which micro-businesses in the field were lagging behind larger companies, and to trigger a wave of financially profitable innovation.

The findings of our research indicate that these meta-organisational strategies are strongly linked to the specialisations within these three clusters. Table 1 below outlines the identities and geographical boundaries of each meta-organisation analysed based on the following factors: the main objective of the meta-organisation and the area in which resources were pooled, the location of the member organisations, the regulatory bodies or public authorities, the location of the end users or clients, and the diversity of the business sectors and value chains involved. These factors determine the individuality of each meta-organisation with regard to the constraints on its activities, as well as the ways in which it can create and implement its own resources. The ICT strategies of these meta-organisations are rooted in these different factors, and are differentiated from one another even within the common context of public policy in support of ICT:

- The PSP PRIDES showed itself to be capable of using the skills of the people working within the meta-organisation to develop a truly innovative piece of software that surpasses the needs of its members, all of whom belong to the same industry and are subject to strict management constraints.
- The ICP PRIDES, which is firmly established in the Arles area and within the network of the CCI, offers support for the adoption of basic digital tools by micro-businesses and SMEs, and has attempted organisational innovations (coworking) which have been made possible by digital technologies, despite the fact that its member organisations come from a variety of different sectors.
- The PCE PRIDES provides an online platform which gives access to a front office service that pools information on services and products as well as shared market intelligence for organisations working in the same sector. It does this without identifying the issue of the digital divide among micro-businesses and SMEs within the sector as a priority.

**Table 1: Analysis of the geographical boundaries of the regional clusters (original table created by the authors based on research data and analysis)**

	<b>PSP PRIDES</b>	<b>ICP PRIDES</b>	<b>PCE PRIDES</b>
<b>Primary objective: shared resources</b>	<ul style="list-style-type: none"> <li>- To promote the provision of care services through organisations (rather than direct employment).</li> <li>- To offer organisational, intellectual and HR resources.</li> </ul>	<ul style="list-style-type: none"> <li>- To support three sub-branches: the improvement of natural, manmade, and cultural heritage.</li> <li>- To support clusters with resources and engineering expertise for micro-businesses and SMEs.</li> <li>- To incentivise collaborative innovation projects.</li> </ul>	<ul style="list-style-type: none"> <li>- To increase the visibility of quality business tourism services, including conference centres and event venues.</li> <li>- Support with client briefs and commercial database maintenance.</li> </ul>
<b>Locations of member organisations (local/national/international)</b>	Throughout the region but sometimes grouped together at the departmental, regional, or national levels.	In principle at the regional level, but with a very high concentration in the Arles area.	<ul style="list-style-type: none"> <li>- Local: convention centres, character hotels, incoming tour operators, small subcontractors (caterers, et cetera).</li> <li>- International: hotel chains, incoming tour operators.</li> </ul>
<b>Trustees/public regulators</b>	Largely regulated activities: dependency, care vouchers (third-party payers), but the region does not provide funding.	<ul style="list-style-type: none"> <li>- Competitiveness: initiatives from the CCIs, region, national government.</li> <li>- Cluster assistance with responses to RFPs and access to public funding.</li> </ul>	Local networks to organise, streamline, and increase the supply capacity of the region's business tourism offering.
<b>Location of end users/clients</b>	The whole region, as well as more local structures (department, communes, et cetera).	- Dependent on sub-sectors and the sizes of organisations and their ecosystems, but very concentrated in the Arles area.	National/European/International, local: Professional or academic associations, corporations, large organisations.
<b>Uniformity/diversity of industries represented and value chains</b>	Common professional sector: care services through organisations. May cover all or (in most	Different sectors: natural/environmental heritage, architectural	All aspects of the business tourism sector: conference centres, luxury

	cases) part of the services involved.	and manmade heritage, cultural outreach and promotion.	hotels, incoming tour operators, service providers (caterers, leisure, culture).
<b>ICT strategy</b>	<ul style="list-style-type: none"> <li>- Supporting tools strategy: shared platform for self-auditing of management.</li> <li>- Intranet for members.</li> <li>- Technology monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>- Adoption of basic digital tools by micro-businesses/SMEs.</li> <li>- Corporate hotels, coworking spaces and support for collaborative projects.</li> <li>- Intranet for members.</li> </ul>	<ul style="list-style-type: none"> <li>- No strategy for micro-businesses and SMEs.</li> <li>- Web platform with centralised services for client brief support, promotion of services.</li> <li>- Use of digital technology for market intelligence.</li> </ul>

The policy for leveraging ICT can be interpreted in two ways. On the one hand, there have been inconsistencies in deployment through “top-down” strategies, with micro-businesses and SMEs initially implementing the tools that meet their immediate needs, while meta-organisations establish strategies in accordance with the stakeholders who are heavily involved and represented in governance. On the other hand, incentives and support targeted at fostering innovation within SMEs could be made part of more bottom-up projects to promote the effectiveness of these government policies at the level of the meta-organisations of clusters that implement them.

In order to be better understood, these shortcomings must also be set in the context of national–regional relations. The regions first had to take over responsibility for administrative control and monitoring of compliance with legislation from central government (Law of 13 August 2004). Then, in 2005, new requirements were introduced for the development of regional economic development plans (*schémas régionaux de développement économique*). These proved extremely restrictive with regard to the conditions for negotiating agreements between the national government and the regions concerning the allocation of state aid to businesses. None of this was very conducive to taking into account the specific characteristics of individual meta-organisations’s geographical area or to assisting neglected business communities.



## Conclusion

The call for ICT-related projects to help develop businesses in the PRIDES led the strategies for micro-businesses and SMEs to adopt and use these technologies to be clarified. In this regard, our study shows that the hierarchy of issues affecting economic development is not the same as that observed at the regional level, as this sees the needs of SMEs and micro-businesses in a generic way, without the socioeconomic and geographical filter that legitimises the need for a meta-organisational layer. This analysis of the relevance and limitations of government policy with regard to the implementation of the ICT lever in SMEs within meta-organisations cannot be extrapolated to all the levers of the cluster policy. It also seems difficult to categorise clusters based solely on their strategic priorities in order to derive general rules as to the effects of government policy within these various clusters. These priorities tend to remain fluid and adaptable over time, depending on the prevalent or changing factors in play. Considering the aims of the policy with regard to SMEs and micro-businesses, the inclusion of meta-organisations within geographical and functional contexts that are specific only to them means that they are not necessarily a relevant layer, as Ganne (2000) observes in relation to dynamic business associations. At the same time, changes in the balance of power in national versus regional planning have not tended to grant the regions greater autonomy to offer incentives that are tailored to these new geographical configurations.

## References

- Amabile, Serge/Gadille, Martine (2003): Les NTIC dans les PME: Stratégies, capacités organisationnelles et avantages concurrentiels. In: *Revue française de gestion* 144 (3), pp. 43-63.
- Andreff, Wladimir (1996): *Les multinationales globales*. Paris: La Découverte.
- Ardenti, R./Vrain, P. (2000): De nouveaux profils de dirigeants dans les PME indépendantes. In: Courault, Bruno/Trouvé, Philippe (Eds.): *Les dynamiques de PME: Approches internationales*. Paris: Presses Universitaires de France, pp. 145-174.
- Arhne, Goran/Brunsson, Nils (2004): Soft Regulation from an Organizational Perspective. In: Mörth, Ulrika (Ed.): *Soft Law in Governance and Regulation: An Interdisciplinary Analysis*. Cheltenham, UK: Edward Elgar, pp. 171-190.
- Bagnasco, Arnaldo/Sabel, Charles F./Brusco, Sebastiano (1994): *PME et développement économique en Europe*. Paris: La Découverte.

Berkowitz, H lo se/Dumez, Herv  (2015): La dynamique des dispositifs d'action collective entre firmes: Le cas des m ta-organisations dans le secteur p trolier. In: L'Ann e sociologique 65 (2), pp. 333-356.

Brown, David H./Lockett, Nigel (2004): Potential of Critical E-Applications for Engaging SMEs in E-Business: A Provider Perspective. In: European Journal of Information Systems 13 (1), pp. 21-34.

Bunel, Jean/Saglio, Jean (1979): L'action patronale. Paris: Presses Universitaires de France.

Cappellin, Riccardo (2010): The Governance of Regional Knowledge Networks. In: Scienze Regionali 9 (3), pp. 5-42.

Cappellin, Riccardo (2017): Ripresa degli investimenti, evoluzione della domanda e integrazione territoriale delle produzioni. In: Cappellin, Riccardo/Baravelli, Maurizio/Bellandi, Marco/Camagni, Roberto/Capasso, Salvatore/Ciciotti, Enrico/Marelli, Enrico (Eds.): Investimenti, innovazione e nuove strategie di impresa: Quale ruolo per la nuova politica industriale e regionale? Milano: Egea.

Cooke, Philip/Morgan, Kevin (1998): The Associational Economy. Oxford: Oxford University Press.

Courault, Bruno (2000): Districts italiens et PME-syst mes fran ais: Comparaison n'est pas raison. In: La lettre du CEE 61, pp. 1-10.

Courault, Bruno (2005): Les PME de la fili re textile habillement face   la mondialisation: Entre restructurations et d localisations. In: La Revue de l'Ires 47 (1), pp. 59-78.

Courault, Bruno (2006): PME et industrialisation: Que sont devenues les PME du miracle choletais (1945-2004)? In: Lescure, Michel (Ed.): La mobilisation du territoire: Les districts industriels en Europe occidentale du XVIIe au XXe si cle. Paris: IGPDE, pp. 413-445.

Crevoisier, Olivier (2001): L'approche par les milieux innovateurs:  tat des lieux et perspectives. In: Revue d' conomie r gionale & urbaine f vrier (1), pp. 153-165.

Dumez, Herv  (2008): Les m ta-organisations. In: Le Libellio d'Aegis 4 (3), pp. 31-36.

Gadille, Martine/d'Iribarne, Alain (2000): La diffusion d'Internet dans les PME: Motifs d'adoption dans les r seaux et ressources mobilis es. In: R seaux 104, pp. 59-92.

Gadille, Martine/P lissier, Maud (2009): Les PME multim dia et logiciel  diteur dans le p le de comp titivit  «Solutions Communicantes S curis es»: Quel mode de gouvernance pour quelle int gration industrielle? In: Management & Avenir 25 (5), pp. 207-226.

Gadille, Martine/M haut, Philippe/Courault, Bruno (2013): Comp tences et r gulation des march s du travail dans les p les de comp titivit : Le cas du p le P gase. In: Revue d' conomie r gionale et urbaine avril (2), pp. 339-361.

Gadille, Martine/Tremblay, Diane-Gabrielle/Vion, Antoine (2013): La m ta-organisation territorialis e: Moteurs d'apprentissages collectifs. In: Intervention  conomique: Association d' conomie Politique 48, pp. 1-12.

- Ganne, B. (2000): PME, districts et nouvelles territorialités. In: Courault, Bruno/Trouvé, Philippe (Eds.): Les dynamiques de PME: Approches internationales. Paris: Presses Universitaires de France, pp. 51-74.
- Garnier, Jacques/Zimmermann, Jean-Benoît (2006): L'aire métropolitaine marseillaise et les territoires de l'industrie. In: Géographie, économie, société 8 (2), pp. 215-238.
- Hancké, Bob (1998): Trust or Hierarchy? Changing Relationships Between Large and Small Firms in France. In: Small Business Economics 11, pp. 237-252.
- Leys, Valérie/Joffre, Patrick (2014): Méta-organisations et évolution des pratiques managériales: Une étude appliquée au champ de la santé. In: Revue française de gestion 338, pp. 45-51.
- Martin, Ron/Sunley, Peter (2003): Deconstructing clusters: Chaotic concept or policy panacea? In: Journal of Economic Geography 3 (1), pp. 5-35.
- Michun, Stéphane (Ed.) (2011): Les territoires au cœur du présent et de l'anticipation. In: Relief (Collection du Cereq) 35, pp. 47-67.
- ObTIC (2011): Rapport de la démarche d'observation de la société de l'information en région Provence-Alpes-Côte d'Azur. Marseille.
- Pecqueur, Bernard (2007): Des pôles de croissance aux pôles de compétitivité: Un nouveau partage des ressources cognitives. In: Réalités industrielles mai, pp. 38-43.
- Perry, Martin (1999): Clusters Last Stand. In: Planning Practice and Research, 14 (2), pp. 149-152.
- Piore, Michael J./Sabel, Charles F. (1984): The Second Industrial Divide: Possibilities for Prosperity. New York: Basic Books.
- Porter, Michael E. (1998): Clusters and Competition: New Agendas for Companies, Governments, and Institutions. In: Porter, Michael E. (Ed.): On Competition. Boston, MA: Harvard Business School Press, pp. 197-288.
- Pyke, Frank/Sengenberger, Werner (1990): Industrial Districts and Inter-Firm Cooperation in Italy: Introduction. In: Pyke, Frank/Becattini, Giacomo/Sengenberger, Werner (Eds.): Industrial Districts and Inter-Firm Cooperation in Italy. Geneva: International Institute for Labour Studies, pp. 1-5.
- Raveyre, Marie-Françoise (2005): De nouveaux dirigeants de PMI pour le milieu rural: Enseignements d'étude de cas. In: Norois: Environnement, aménagement, société 197, pp. 83-94.
- Raveyre, Marie-Françoise/Saglio, Jean (1984): Les systèmes industriels localisés: Éléments pour une analyse sociologique des ensembles de PME industriels. In: Sociologie du Travail 26 (2), pp. 157-176.
- Région Provence-Alpes-Côte d'Azur (2007): Contrat de projets état-région 2007-2013. Marseille.

Sabel, Charles F. (1994): Learning by Monitoring: The Institutions of Economic Development. In: Smelser, Neil. J./Swedberg, Richard (Eds.): The Handbook of Economic Sociology. Princeton, NJ: Princeton University Press, pp. 127-165.

Saglio, Jean (1991): Échange social et identité collective dans les systèmes industriels. In: Sociologie du Travail 33 (4), pp. 529-544.

Savey, S. (1994): Espace, territoire, développement local. In: G. Duche (Ed.): Territoires en mutation: À la mémoire de Jean Le Coz. Montpellier, France: CIHEAM-IAMM, pp. 39-41.

Scott, Allen J. (1998). Regions and the World Economy. Oxford: Oxford University Press.

Segreto, Luciano (2006): Le regroupement districale dans l'industrialisation italienne après 1945. In: Méditerranée: Revue géographique des pays méditerranéens 106, pp. 49-56.

Sellier, François (1984): La confrontation sociale en France. Paris: Presses Universitaires de France.

Wittorski, Richard (2008): La notion d'identité collective. In: Kaddouri, Mokhtar/Lespessailles, Corinne/Maillebouis, Madeleine/Vasconcellos, Maria (Eds.): La question identitaire dans le travail et la formation: Contributions de la recherche, état des pratiques et étude bibliographique. Paris: L'Harmattan, Logiques Sociales, pp. 195-213.

Zalio, Pierre-Paul (2004): Territoires et activités économiques: Une approche par la sociologie des entrepreneurs. In: Genèses 56 (3), pp. 4-27.