BETWEEN THEORY AND PRACTICE : DELIVERING ENTREPRENEURSHIP AND INNOVATION SUPPORT SERVICES AT REGIONAL LEVEL

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Introduction

Whether by conviction, due to fashion or under pressure from economic globalisation, all public authorities invest in both physical and intangible support services to promote entrepreneurship and innovation, which have become pillars of their regional development strategies. In fact, entrepreneurship has become a textbook assignment for all local and regional authorities – though the degree of sophistication of their intervention varies considerably according to their size and financial capacity.

While physical infrastructure and some intangible concepts (incubation, clusters, technological centres, etc.) have become accessible to many territories, outcomes in terms of added value, GDP growth and job creations vary across regions because few are able – or willing – to build the critical mass needed to implement the good governance needed to guarantee an adequate return on investment.

Next to cultural causes relating to risk-taking, the sources of differences between regions include:

1. human resources – through leadership –, governance and entrepreneurial talent;
2. critical mass;
3. access to both seed and growth venture capital;
4. network quality;
5. the perception of market opportunities – and hence of profit – among entrepreneurs and investors;
6. the inefficiency of strategies promoting a multiplication of schemes and a diversity of stakeholders rather than a single, quality integrated approach.

Of course, entrepreneurship and innovation happen spontaneously – although they are sometimes curbed by public constraints. The role of public authorities must therefore consist in stimulating an acceleration of these naturally-occurring phenomena by removing administrative and legal barriers, eliminating the asymmetric information facing business developers and SMEs and lowering transaction costs or promoting/facilitating the anticipation of change.

The aim of the present document is to enumerate the support services deployed by public authorities to stimulate entrepreneurship and improve access to finance and innovation – while underscoring that implementing these by no means guarantees success. Indeed, support service fragmentation and the difficulty of perceiving SME needs both serve to compromise the effectiveness of provision owing to a lack of scheme fluidity and sterile competition due either to manager ego or to the race among managing organisations for operational subsidies – with some even mistaking information dissemination for know-how when it comes to advertising their abilities.

Worth recalling is that strategic success is secured by the fluid and complementary nature of tools rather than their juxtaposition or accumulation "lasagna fashion"!

Moreover, many schemes lack ambition when it comes to the ability to accelerate business growth. Too often incubation is considered an end in itself when its role should be to leverage growth. Its original role was undoubtedly adequate back in the 80s, when the aim was to turn around a socioeconomic fabric that was hit by industrial decline. In a globalised economy however, this role must be reviewed or completed with specific schemes that stimulate the development of “gazelles”, i.e. entrepreneurial growth companies or EGCs.

Therefore, regional innovation strategies have to become "start-ups hub” strategies and public intervention needs to be geared toward competitive innovation, i.e. support services that both help turn knowledge into products and services accepted by the market and ensure that supported companies turn a profit – being the strongest incentive for entrepreneurship.
The present document was developed to demonstrate the relevance of the following points:

- No public policy can be developed or implemented without considering the regional human and financial capital as well as governance;
- When granted, public financial support must be completed by advisory services (coaching, mentoring);
- Public authorities must constantly evaluate the effects of their strategies. To do so, they need to think in terms of the supply chain and regularly scan the latter for weaknesses;
- The success of any strategy hinges as much – if not more – on a wide diversity of intangible factors (governance, leadership, networking, etc.), on critical mass (available finance, number of companies involved and newly-developed start-ups, added value production, etc.) and on regional intelligence as it does on infrastructure.

The present document therefore posits that regional development rests on the ability to leverage inputs including governance, public policies, the regional, human and financial capital, infrastructure and culture. This ability generally depends on the quality of networks and on the dynamism of intermediary organisations and private investors. The expected outcomes of this regional development process are enhanced revenue (profits, wages, taxes), productivity, entrepreneurship, innovation and knowledge.

In this context, regional development is a set of measures taken by both public and private stakeholders with the aim of reaching a higher rate of economic growth compared to the average of other regions. This growth rate can be measured in new jobs, profits, higher average regional wages and tax income. This is turn requires productivity and competitiveness gains, innovation, business development and improved market access. Sustained investment is needed in fields including education and training, talent attraction and retention, applied research and regional attractiveness. Also needed are quality infrastructure, seed capital and good quality of life. Governance efforts and recognised leadership are essential requirements. This is all facilitated by the availability of social capital and networks, an entrepreneurial culture and positive demographics.
INTRODUCTION

Entrepreneurship is at the heart of a growing number of national and regional strategies. Because individual territories have their own culture and no two entrepreneurial projects are alike, support service provision needs to adjust. In other words, generalist services need to exist alongside high value-added services and their provision needs to be segmented to meet the needs of every category of entrepreneurs, of the different stages in the business lifecycle and of the industry in which companies operate.

Worth underscoring is that business development cannot be willed by public policies, even to fight unemployment: it must continue to be a reaction to the perception of potential profit and market opportunities. Therefore, business support services must aim to reduce the entrepreneurial risk, improve market access and speed up business growth.

Thus, all entrepreneurship strategies must seek to address the five challenges below:

a) understanding business needs and anticipating market failures;

b) providing a good product mix combining financial and advisory services;

c) being developed as supply chains geared to help a majority of businesses become global competitors;

d) evolving toward provision of strong value-added services including in the form of public-private partnerships;

e) harnessing intangible regional resources, i.e. the regional social and human capital and image.

The segmentation of the “business” clients of regional entrepreneurship strategies can be based on the ten categories of businesses below:

1. newly-developed companies;
2. spin-outs and spin-offs of large businesses, research centres and universities;
3. start-ups (less than five years in existence);
4. locally- or socially-rooted companies (micro-businesses and craft companies);
5. entrepreneurial growth companies;
6. innovative businesses and companies leveraging RTD outcomes;
7. companies in the process of being transferred;
8. subcontractors;
9. companies at risk of bankruptcy;
10. multinationals.

In addition to the specific features of the above typology of businesses, service provision needs to be tailored to the requirements and size of the different industries in which supported companies operate.

Generally speaking, businesses may expect public authorities to support them in areas including:

- development and growth;
- production tool and corporate real estate finance;
• access to skilled labour;
• accumulation of own equity;
• intangible finance.

To achieve this, the intervention of public authorities may take the form of direct aid to companies or the financing of intermediary bodies.

The objectives of public authorities in doing so include:
• creating jobs to support overall regional development;
• serving spatial planning aims by maintaining or supporting business activities;
• regional reconversion (rescue, sectoral aid, etc.);
• business activation (innovation, finance, networking, etc.);
• sustainable development.

Worth underscoring is that entrepreneurial dynamism is the main ingredient of so-called "regions of excellence" and that while entrepreneurship support services are all individually useful, they can only deliver their full potential when mainstreamed into a supply chain denoting an integrated public policy.

It should be pointed out that the development, consolidation and fast growth of regional businesses are affected by structural and cyclical factors including:
• **Culture**: entrepreneurship and innovation, disposition toward money and success, perception of business inherited from the regional business and industrial history;
• **Framework conditions**: tax environment, bureaucracy, welfare and unemployment benefit systems, stigmatisation of failure, relative quality of advisory services for prospective business developers, nature of support (too often defensive as opposed to proactive or innovative);
• **Prospective business developer psychology**: risk avoidance, talent, creativeness, lifestyle, quality of relations with other business managers;
• **Public SME support schemes**: fragmentation of operators, sclerotic support organisations paralysing schemes by promoting client-centred approaches as opposed to dynamic intermediary bodies that are able to provide high value-added services;
• **Economic cycles**: in times of recession, business developers emerge of necessity; in periods of growth, only the ones who are able to leverage market opportunities do so.

The basic argument made in the present document is illustrated in the four diagrams below, visualising the concepts of:
• entrepreneurship lifecycle;
• entrepreneurship ecosystem;
• regional entrepreneurship supply chain;
• value chain of a "start-up" hub.

**Graph 1  Entrepreneurship lifecycle**

- Concept
- Proof of concept
- Development
- Investment readiness
- Start-up
- Growth
- Expansion
- Transmission / Merger / Acquisition

Source: EURADA
Graph 2  Entrepreneurship ecosystem

Source: EURADA
Since the mid-90s, the concept of benchmarking has become a standard tool to compare public policies aimed at supporting economic development. Since benchmarking very often appears to be a ranking method rather than a tool to analyse and improve project and programme effectiveness, it is now of interest to understand and compare the value chains of those policies. This way of proceeding also enables to show that it is the integrated approach itself as well as its managers that make the difference rather than individual chain links.

Analysing value chains has the following advantages:

- identifying interactions between service value chain links and their weak links;
- identifying environmental weaknesses as well as key framework conditions of effective public policy delivery;
- understanding delivery mechanisms;
- identifying regional flexibility and governance.

Worth mentioning is that there is a need for any regional value chain analysis to include consideration of the parameters below:

  a) The separate links of individual value chains;
  b) The prerequisites of value chain deployment;
  c) Delivery mechanisms.

It is often useful to dwell on the prerequisites of value chain deployment. Indeed, it is crucial to ascertain the strengths and weaknesses of public, private and intermediary players, to evaluate their cooperation methods and to jointly work out a set of shared objectives and vision for regional or industrial development.

Below are value chains relating to fostering entrepreneurship on the one hand and "start-up" hubs on the other hand.
• Awareness campaigns, communication
• Welcoming would be entrepreneurs
• Assistance with drafting business plans

Culture → Awareness among the general population → Validation of the business concept → Assistance with the incorporation process → Overcoming the "Death Valley" → Support during growth phases → Taking up innovation

• Training and management
• Advisory services
• Access to finance
• (Pre)incubation
• Access to enterprise real estate

Source: EURADA
Graph 4  Value chain of a "start-up" hub

**Infrastructures**
- Training centres
- Technology transfer agencies
- Technology centres
- Innovation centres
- University / SME interfaces
- Laboratories
- Prototyping
- Industrial parks
- Incubators
- Science parks
- Provision of premises on flexible lease terms

**Business support**
- Entrepreneurship training, general advice and support, spin-offs, technology transfer
- Proof of concept, leveraging the outcomes of research and innovative concepts
- Assistance with registering new businesses
- Access to start-up equity and business infrastructure
- Access to initial clients and markets
- Providing assistance to entrepreneurs in overcoming the "Death Valley"
- Development, growth and innovation

**Training**
- Culture of innovation and awareness programmes
- First advisory stop shop
- Business consulting
- Investment readiness schemes
- Entrepreneurship advisory programmes
- Mentoring
- Competitiveness support scheme
- Innovation

**Sources of finance**
- Subsidy programmes (pre-)seed and venture capital
- Venture capital, IPO
- Mezzanine
- Guarantees
- Leasing
- Micro-credit and other forms of start-up capital
- Merger and acquisition
- Bank loans
- Subsidy programmes
- FFF (Family, Friends and co-Founders)
- (Pre-)seed
- Business angels
- Venture capital
- Guarantees
- Leasing
- Merger and acquisition
- Mezzanine
- IPO

**Role of University**
- Entrepreneurship training
- Spin out/off
- Access to laboratories
- Provision of expertise
- University-based seed capital
- Incubators
- Technological parks
- Advanced advisory services
- University / Enterprise interface
- Involvement in clusters

Source: EURADA
CHAPTER 1  SUPPORT SERVICES AND THE BUSINESS LIFECYCLE

1.1 Awareness

As underscored above in the introduction, entrepreneurial culture levels and business development rates are extremely variable across regions.

In some regions, business development is strong due to market constraints (the “businessman by obligation” syndrome) while it is weak in others due to a negative perception of business or an aversion for risk.

Therefore, action may be needed to stimulate awareness of entrepreneurship among the general population. Worth mentioning among those are for instance:

- business weeks or days;
- business plan or development competitions;
- entrepreneurship fairs;
- awareness campaigns focusing on schools, universities and the general population;
- business transmission fairs;
- university and research centre spin-off schemes;
- entrepreneurship training programmes;
- introduction to entrepreneurship.

The aim of these activities can be to improve the attractiveness of entrepreneurship and make it a possible career path for both the younger and other social segments of the population.

Awareness programmes should enable intermediary organisations to identify people with a latent project and other potential business developers.

Nous émettons des réserves quant au développement d'une politique "d'entrepreneuriat pour tous", essentiellement pour deux raisons :

a) les stigmates d'un CV employé-chômeur-entrepreneur-failli
b) une majorité de créateurs de très petites entreprises (TPE) voire d'entreprises de services à la personne n'ont pas les compétences managériales requises et présentent des risques importants de faillite en cas de récession économique.

Specialised sources include:

✓ Business development and business plan competitions: these provide young entrepreneurs with useful access to both expertise and funding sources. Award-winning business projects win prize-money of up to €15,000 or more in Poitou-Charente (F) and/or a services or equipment package. Some of these competitions are only open to innovative businesses. This is for instance the case of the regional innovation contest of Midi-Pyrénées.

✓ Entrepreneurship training: Its purpose is to improve potential entrepreneurs’ awareness of access to different funding sources. Interesting initiatives include:

- Solvay School (B) and Aisne Development Agency (F) as well as IRCE (Regional Institute for Business Creation and Development of the Region Provence-Alpes-Côte d'Azur);
- In Belgium, BEP (the Regional Economic Development Office of the Province of Namur) set up NEC - Namur Entrepreneurship Centre in cooperation with two university departments. NEC’s purpose is to assist would be entrepreneurs by integrating them in a targeted, practical training scheme and providing customised support. Training is provided over five months. The first training session was attended by 20 people.

✓ Entrepreneurship fairs: A number of countries and regions organise events both to promote entrepreneurship and to access the latest developments in the field of support services for would be entrepreneurs, and possibly on the promotion of family business transmission across generations.

Below is a model flow chart for an entrepreneurship fair introducing a possible itinerary along which visitors are steered in different directions according to their degree of preparedness for entrepreneurship – i.e. mainly whether they have a precise business concept and/or the outlines of a business plan.
Graph 5  Entrepreneurship fair model

- ENTREANCE
  - Visitors are given their entrepreneurshi p passport
  - Guidance
    - Register of transmissible companies
    - Interested
      - Information about statutory incorporation formalities
      - Personal motivation appraisal
      - Business plan development support
- Waiting area: video/film
  - Visitors with concept and/or business plan outline
    - Entrepreneurial profile determination
    - Business plan evaluation
    - Basic advice-and-formalities desk
      - Value-added legal, quality, intellectual property, branding, design and other advice
      - Import / export / sub-contracting advice
    - Technical centres and universities
    - Access to funding sources
    - Vocational training centre
    - Corporate real estate
    - Business club area
    - Coaches/Mentor
    - Industrial intelligence
    - EXIT

Source: EURADA
1.2 From business concept to development

According to a number of studies, there are more potential than actual business developers. Besides, given the stigma left by bankruptcy, intermediary organisations should introduce advisory and appraisal schemes regarding business development projects to maximise new business consolidation. Such appraisal systems should address both the quality of projects and potential business developers’ psychological and managerial abilities.

To help business developers identify precisely the stakes of their projects, regional public authorities may usefully implement services including:

- entrepreneurship and business development seminars and training;
- self-evaluation guides;
- networks of young/potential entrepreneurs;
- business plan development support;
- assistance in choosing the right corporate personality;
- support in identifying any and all subsidies available for the different corporate positions;
- definition of projected staff skills requirements;
- provision of coaches and mentors.

When it comes to tech business projects, “proof of concept” support schemes have demonstrated their effectiveness in the regions that have deployed them. The same can be said of “investment readiness”, a concept that aims to improve business project packaging for submission to investors.

In a nutshell, the purpose of proof-of-concept support is to enable teams of researchers to make sure that their project – commercialisation of their research outcomes – is solid enough, has outlets on a long term market and is not threatened by intellectual property issues. Enterprise Ireland and Scottish Enterprise emerge as pioneer RDAs in this field in Europe, with the former generally providing €90,000 in aid per project over a period of 18 months.

As for the concept of investment readiness, it aims to enable business managers to better prepare for equity investment by the most suitable kind of venture capitalist in the stock of their company. Worth pointing out is that the expectations of businesspersons and the demands of investors are all too often asymmetrical and that the former are not often aware of the fact that all funding sources are not the same. Indeed, they each meet a specific type of needs and generally correspond to a particular stage in the business lifecycle.

1.3 Development

When potential business developers are identified, an “acting out” phase starts during which business development services have to carefully look for both the qualities required in entrepreneurs and the credibility of their business proposition. At this point, generalist advisory services are useful, including those listed below:

- appraisal of business plan appropriateness;
- support in procuring the administrative documents required to start a company – one-stop shops are particularly useful in this respect;
- assistance in securing public subsidies and reduced social charges for the first jobs created;
- assessment of corporate real estate requirements.

In the case of innovative and entrepreneurial growth business projects, developers need guidance to:

- protect or secure intellectual property – including brands, industrial designs or even trade secrets;
- leverage intellectual property;
- globalise their market approach;
- market their products and services and survey markets;
- financing needs;
• outsourcing of certain roles or services;
• possible growth scenarios (internal, external, franchising, etc.);
• management and staff training needs;
• tutoring, coaching, mentoring;
• prototyping and preproduction.

1.4 Start-up
At start-up, support service needs may take a variety of forms including:
✓ incubation in the form of accommodation in a tech-oriented business incubator or nursery;
✓ corporate real estate;
✓ direct advice or even tutoring;
✓ assistance in outsourcing certain non critical positions and selecting consultants;
✓ staff recruitment.

The aim of this type of services is to enable new businesses to survive the "death valley" – a life-threatening period occurring three to five years into every company’s existence.

The development stage is often synonymous with the quest for external finance. Funding sources generally belong to five categories:
• loans;
• subsidies;
• venture capital;
• guarantees;
• tax exemptions.

Each of them may exist in different formats – though each has its own specific features (see part 2 “All Money is Not the Same!” below). However, they are all characterised by one shared feature, i.e. the fact that all finance providers will demand guarantees relating to:
• the management team (venture capital);
• the ability to reimburse (loans) or the existence of exit routes (venture capital);
• the growth potential (venture capital) of the business or its ability to create jobs (subsidies);
• the company’s history (loans, subsidies).

1.5 Growth
Clearly, some companies are not meant to grow because their products and services are of strictly regional value – franchising does however mean that the growth potential of companies is not geographically limited – or because their management lacks growth potential (businessman “by obligation” or as a lifestyle choice).

This being said, a majority of businesses have to be motivated by growth, i.e. by product and/or market innovation or diversification. Intermediary bodies can help companies acquire or improve their growth potential. Such support can be provided in one or more of the following forms:
✓ detection of latent growth potential, especially through exports or innovation;
✓ matching businesses with specialist organisations including consultants and universities;
✓ business networking.

These objectives can be pursued using subsidies, advice or vouchers.

Support services must try to reckon with the fact that business growth can take one or more of the following forms:
• product/service innovation through quality, design, marketing and branding, distribution channels, geographical diversification, etc.;
• innovation in the production process;
• innovation in the business model;
• innovation in the RTD and innovation process;
- acquisition of other companies.

Special attention should be focused on detecting gazelles or EGCs (entrepreneurial growth companies).

1.6 Expansion

In a globalised economy resting on knowledge and competition driven by innovation, it has become vital for SMEs to rapidly reach the critical size enabling them to become a leader on their market.

To better define the kinds of support services that need developing in order to support the expansion of EGCs (“gazelles”), it is useful to precisely identify both their characteristics and their needs.

In general, gazelles share the following features:
- strong innovation capacity in terms both of products and process or business model;
- strong market orientation characterised by high-quality products and the ability to quickly meet client needs,
- the ability to motivate staff,
- fluent practice of alliances and partnerships with all links in the corporate value chain (clients, suppliers, subcontractors, experts – including in RTD –, etc.),
- growth through acquisition of other SMEs.

In general, gazelles need to grow their sales fast, preserve their competitive edge – including in the form of different types of intellectual property – and increase their intrinsic value in order to attract venture capitalists. Worth noting is that few public business support schemes are able to meet this category of needs.

1.7 Transmission

When the time comes for managers to retire, business transmission becomes an issue. To ensure a smooth transition while avoiding the loss of jobs and know-how, intermediary organisations can provide support services for both the outgoing and the (potential) incoming entrepreneur. Advice of this kind must be supported with a scheme to match offer and demand (register of transmissible companies, etc.) as well as consultancy services for buyers focusing of the search for finance.

1.8 Improving business survival

The average life-expectancy of businesses is observed at 5 to 7 years. It is therefore advisable to examine the best ways of extending it in order both to preserve jobs and avoid the negative personal and other consequences of bankruptcy – even though the economic theory developed by Schumpeter tends to show that in terms of entrepreneurial dynamism, regions stand to benefit from a cycle of business deconstruction/construction.

With a view to helping businesses survive, government can deploy:
- Business retention schemes (cf. Point 1.10 below;
- Methods for early identification of susceptibility to bankruptcy;
- Business transfer instruments;
- Business opportunity reviews for micro-businesses and crafts.

1.9 Business internationalisation

Globalisation increasingly requires businesses to go international. Internationalisation activities may address one or more of the following objectives:
✓ Boosting sales or market shares;
✓ The need to grow fast;
✓ The search for opportunities on emerging markets;
✓ Cutting input costs;
✓ Procuring knowledge to improve innovation;
✓ Strategic relocation.

The main tools available to public authorities in stimulating business internationalisation need to include different possible intervention formats including:

a) Commercial / Financial
   • Plain exporting
   • Agent and distributor
   • Franchising
   • Co-contracting
   • Joint venture
   • Acquisition or participation
   • Merger

b) Industrial
   • Joint production
   • Subcontracting
   • Joint tendering
   • Licence
   • Technological development
   • Technology transfer
   • Offshoring
   • Outsourcing

c) Inward investment or strategic delocalisation. The rational behind doing this might as well be the need to geographically follow a major client or to access cheaper components.

d) Co-research and co-innovation activities.

Evidently, the first form of internationalisation for many SMEs is making an export sale; subsequently, the enterprise will look into market analysis, looking for an agent and then a distributor, and finally negotiate a partnership agreement. Some enterprises may turn out to have no need to exceed the first step consisting of direct sales.

An intermediation body may offer a vast range of services for promoting the internationalisation of the enterprises. These services generally depend on the intended type of internationalisation. The services may be grouped in six main categories:

1. Information and promotion services
   These services cover actions such as internationalisation awareness campaigns, market information (sector or geographic area), organising information and contact missions, organising missions abroad and hosting foreign enterprise missions to the region, setting up systems for assisting in participating in trade fairs or for financing internationalisation activities.

2. Training services
   These services cover actions implemented with a small group of enterprises that have the intention and the capacity to internationalise. Very often these will be specific seminars and advice to enterprises, so that they may improve their performance, mainly in the field of the organisation of the enterprise and the flexibility as regards products or production.
   Establishing contacts (for instance in exporters' clubs or clusters) between enterprises with established experience in internationalisation and enterprises in the learning stage is an excellent means for stimulating the self-confidence of the exporters.
   Placing new graduates in SMEs to help them develop an export strategy can be a very useful tool.

3. Custom-tailored services
These services include the individualised services, amongst which we would like to mention the exchange of enterprise profiles, bilateral contacts between enterprises, granting personal advice or also financial assistance of all kinds (product development, etc...).
The use of export consultants temporarily made available for SMEs is being tested in several countries with success.
After the achievement of certain actions it can reveal useful to ensure an "after-sales service" in order to avoid that the contacts made would not properly be followed-up.
Moreover the placement of young graduates in SMEs in order to help them develop an export strategy can be a valuable training tool for SMEs.

4. Specialist collective services

When the regional productive fabric consists of small enterprises, one should consider grouping the internationalisation assistance services within a specific association, a cluster or an exporters' club. The association or cluster will propose specific export services, while the enterprises will keep their freedom of action at the regional or even national level. Amongst the services to be proposed, one observes most often the understanding of foreign market trends, the trademark or label, the design, the technology, the logistics and the economic intelligence, etc.
More and more regional intermediary bodies have today offices in foreign countries to help their SMEs develop contacts with potential partners.

5. Export Finance Tools

A lot of European SMEs face problems to access finance and so have weak balance sheets. Export or internationalisation activities are often expensive (market research, logistics costs, product redevelopment, marketing, payment delays, exchange risks). In order to help enterprises overcome those challenges, public authorities can offer financial assistance in the form of export credits and/or guarantees.

6. Hands on management

Today, public authorities try to provide added value services also called advanced services. The most efficient way to deliver such support services is to combine training, advice and access to finance.

7. Coaching and mentoring

In order to improve SME awareness of the specifics of foreign markets, some development agencies have set up mentoring schemes involving large companies with international experience.

8. Business hotels

Some organisations (RDAs, incubators, etc.) provide SMEs that want to enter new markets on a trial basis with – often free – temporary (1-3 months) office space and advice, including bilateral appointments with experts (see EOS: http://www.eurooffice-services.eu).

Regional business internationalisation strategies systematically need to reckon with the type of companies they target. Indeed, going international requires in-house capacities and abilities that are not necessarily in evidence in all SMEs and companies whose primary market is regional.

1.10 Business retention

Regional business retention strategies can be assigned two different objectives: preventing either the relocation of existing subsidiaries of international companies or the offshoring of activities of regional companies. In both cases, intermediary organisations – e.g. RDAs – need to open secure communication channels with top business managers to guarantee that the competitive advantages that existed at the time they originally located in a region still exist and – should that not no longer be the case – examine with them the kinds of public intervention that could restore these or create new ones.
## 1.11 Summary of public business support services according to the business lifecycle and the nature of support

<table>
<thead>
<tr>
<th></th>
<th>PREDEVELOPMENT</th>
<th>DEVELOPMENT</th>
<th>START-UP</th>
<th>GROWTH</th>
<th>TRANSMISSION</th>
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<tr>
<td><strong>Infrastructure</strong></td>
<td>Pre-incubator</td>
<td>Incubator</td>
<td>Industrial parks</td>
<td>Technology transfer centre</td>
<td>Transmission fairs</td>
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<td></td>
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<td>Nursery</td>
<td>Technological parks</td>
<td>Technical centre</td>
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<td>Corporate real estate</td>
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<tr>
<td><strong>Support services</strong></td>
<td>Awarebess</td>
<td>Business plan development</td>
<td>Advisory services</td>
<td>University/SME interface</td>
<td>Assistance with the valuation</td>
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<td></td>
<td>Proof of concept</td>
<td>assistance</td>
<td>Coaching</td>
<td>Audit</td>
<td>and takeover process</td>
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<td></td>
<td></td>
<td>Generalist services</td>
<td>Training</td>
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<tr>
<td><strong>Financial services</strong></td>
<td>Seed Capital</td>
<td>Loans on trust</td>
<td>Guarantees</td>
<td>Venture capital</td>
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<td></td>
<td>Repayable short-term</td>
<td>Subsidies</td>
<td>Bank loans</td>
<td>IPO</td>
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<tr>
<td></td>
<td>loans</td>
<td>Guarantees</td>
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<td>Profit reinvestment</td>
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<td></td>
<td>Subsidies</td>
<td>Business Angels</td>
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<td></td>
<td>Proof of concept</td>
<td>Corporate Venture</td>
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<tr>
<td><strong>Delivery mechanism</strong></td>
<td>One-on-one</td>
<td>Investment readiness</td>
<td>Consultancy vouchers</td>
<td>Audits Clusters</td>
<td>Register of companies</td>
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<td></td>
<td></td>
<td>Hands-on management</td>
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<td>Consultancy vouchers</td>
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<td>Placement of post-graduate</td>
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<td>students</td>
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<td></td>
<td>In-service training support</td>
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<tr>
<td><strong>Framework programme</strong></td>
<td>Entrepreneurship</td>
<td>Development support</td>
<td>Development support</td>
<td>Innovation</td>
<td>Takeovers and transmission</td>
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<td>Internationalisation</td>
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<tr>
<td><strong>Market</strong></td>
<td>Validation</td>
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<td>Prototyping</td>
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<td><strong>Qualification</strong></td>
<td>Psychology of</td>
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<td>Management support</td>
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<td></td>
<td>entrepreneurship</td>
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<td></td>
<td>Entrepreneurship training</td>
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<td></td>
<td>Job creation subsidies</td>
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</tbody>
</table>

Source: EURADA
CHAPTER 2 CHARACTERISING THE LINKS OF THE REGIONAL PUBLIC BUSINESS SUPPORT SERVICES SUPPLY CHAIN

2.1 Context

When it comes to business support services, there is generally speaking a plethora of stakeholders and interventions at both national and regional level. However, this multiplicity does not avoid a structural lack of strong value-added service providers. Indeed, a majority of stakeholders – and even of interventions – target businesses in the early stages of their lifecycle with a range of generalist advisory services which, while admittedly essential to promote incorporation decisions, are inadequate when it comes to enabling fast business growth.

With differences across countries and regions, the stakeholders of the entrepreneurship value chain include:

- National Ministries of Economic Affairs – and sometimes SMEs – or SME/Business Agencies;
- The economic services of local and regional authorities;
- Regional development agencies;
- Chambers of commerce;
- Business nurseries;
- Incubators;
- Universities and research centres (advisory services and spin-offs/outs);
- Networks of business angels and other investors;
- Private consultants;
- Social economy players;
- Technological park managers;
- Trade associations;
- Professional business advisors (solicitors, accountants, etc.);
- Cluster and competitiveness centre coordinators;
- Industrial technical centres;
- Banks and other financial organisations;
- Business angels networks.

Among this broad assortment of private, public and semi-public organisations that can provide variable amounts of support to (would-be) entrepreneurs in obtaining useful information to start their business, some use the “touch and go” approach (i.e. they supply basic information to many people) while others provide specialist advisory services and even in some cases match business developers with potential investors. Many have started privileging the “no-wrong-door” approach and network entrepreneurship or innovation stakeholders.

Specialised sources include:

- Banks: they are often the first organisations that entrepreneurs looking for funding to develop their projects turn to. However, bankers more often than never limit their analysis to a credit solution. If the answer is negative, there would be a need for bankers to ensure that business projects are referred to other organisations specialising in SME consulting services and alternative funding sources.

- Regional Development Agencies (RDAs): These can be considered as the regional and local authorities’ “development arm” and they all provide business advice services. Some RDAs act as intermediates between entrepreneurs and investors. In this particular case, they inform themselves of the investors’ requirements beforehand (amounts, preferred sector of activity,...) and hereby reducing the useless steps that the ignorant entrepreneurs would take normally. Other RDAs also manage financial instruments ranging from public grants to sophisticated financial engineering products. The RDA of West Midlands (UK) developed a web portal compiling some 550 different funding sources.

- Business angel networks – BANs. These organisations facilitate the access to equity finance of young innovative enterprises.
Business incubators and nurseries: in addition to accommodating businesses at suitably competitive rates with assorted secretarial support services, they offer specialised advice (in matters relating to taxes, regulations, intellectual property, technology transfers, etc.), including to companies looking for finance. Sometimes they even manage to raise funding for the companies that they accommodate or have suitable financial instruments available. According to a survey conducted by the Harvard Business Schools (USA) and published in 2000, 40% of incubators operating worldwide have managed to assist tenant SMEs in securing venture capital.

Incubators linked to universities and other higher technical and technology institutes: e.g. the incubator of Franche-Comté (F) linked to both the Technology University of Belfort Montbéliard and the École Nationale Supérieure de la micromécanique (Higher National School of Micromechanics) in Besançon. The importance of entrepreneurship services provided by universities is illustrated by the fact that 150 to 200 university spin-offs emerged in the UK in both 2001 and 2002.

Technology parks: the organisations managing this type of infrastructure may also contribute relevant information on the types of finance that are suited to the development needs of businesses.

Cluster management organisations, a.k.a. “industrial districts” and “local productive systems”: they may prove extremely useful for businesses in procuring information or even assistance (general or financial advice). Such organisations exist at regional level in many Member States.

Specialist private consultancy firms as well as accountants, lawyers, etc. can of course provide invaluable advice when it comes to business development and growth.

While the mobilisation of so many different organisations in support of entrepreneurship is in principle a source of deep satisfaction, schemes can often be seen to proliferate to the detriment of efficiency, which makes it difficult for companies to identify competent interlocutors. Public authorities should hence clearly distinguish between different concepts including one stop shops, single advisory contact points and specialist desks and in any case get as many different stakeholders as possible to cooperate as part of a “no-wrong-door” approach. The ease with which such an approach can be implemented is proportional to the number of intermediary bodies involved that are dependent upon public subsidies, the strength of public governance and acceptance of the latter among the former.

Thanks to NICT, regional public authorities can develop portals aimed at simplifying the identification of available support within a region. The best such portals need to enable business developers to file a single on-line application for support and keep track of its progress through support organisations, thereby implementing the “no wrong door” concept developed in the Appalachians (USA).

Worth mentioning by way of example is the portal of the region of Bourgogne (F), whose aim is to make life easier for businesses by coordinating the actions of economic development stakeholders and substituting a single, publicly-available on-line file for the different files previously used by different stakeholders. The website (www.jentreprendsenbourgogne.fr) features an information section answering the questions of entrepreneurs or referring them to the stakeholders who are most likely to be able to answer them.

2.2 Intervention by regional/local authorities

Generally speaking, public authorities grant subsidies in support of aims including:

- business development;
- economic expansion of regional SMEs;
- attraction of foreign companies;
- staff recruitment or training (creation of local jobs);
- innovation and RTD;
- networking.

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1 Cordis Focus n°234, 1 December 2003
Aid may be provided in the form of subsidies; guarantees; tax relief; access to advice or corporate real estate, R&D or innovation centres or sources of finance; and infrastructure or membership of networks or clusters. It may also stimulate either investment or improved business operation or management.

Worth noting at the level of the 27 Member States of the European Union is that the two main forms of state aid to the private sector are subsidies (51% in 2005) and tax exemptions (40%). Low interest loans (3%), guarantees (3%), tax deferral (2%) and equity investment (1%) only represent a small share of the €65 billion of aid granted in the EU in 2005.

France can be considered a good example of the role of the different levels of government in economic development. Indeed, aid is provided by five different sub-national levels of government. According to a report published in 2007, economic development aid provided in the region of Aquitaine (pop.: 3,090,000) totalled around €275.4 million in 2006 (i.e. €89.12/inhab./year), breaking down as follows:

- region: €149.3 million, i.e. 54.22%;
- 5 departments: €93.4 million, i.e. 34.03%;
- Urban community of Bordeaux: €11.7 million
- 5 groupings of urban centres: €15.1 million
- 14 groups of municipalities: €5.6 million, i.e. 2.03%.

Intervention by departments and other local authorities in the form of economic development aid breaks down into six categories:

1. Notified regional aid schemes;
2. Notified SME schemes;
3. Notified schemes or regulations;
4. Notified R&D schemes;
5. Exemption regulations;
6. Others.

As for regional aid, it takes the following forms:

- Aid to individual companies, i.e.: real estate investment subsidies, tangible investment subsidies, financial restructuring subsidies, management post creation, export subsidies, investment in new operations, Aquitaine consultancy aid fund;
- Support for micro businesses, trade and crafts, i.e.: finance support, consultancy aid, indirect aid (support for technological parks, nurseries, loan-on-trust associations, guarantee funds, etc.);
- Support for research, higher education and technology transfer;
- Support for environment technology;
- Support for farming, agro-food, forests and the sea.

In its inventory of support available in the Walloon Region (B), IGRETEC groups aid into the nine main categories below:

1. General aid in support of the economic expansion of SMEs (investment premiums, advisory services, management outsourcing, quality premiums);
2. Employment and training aids;
3. Innovation and RTD aids;
4. Tax relief;
5. Export subsidies;
6. Energy savings and environmental aids;
7. Financial support;
8. EU support;
9. IT mainstreaming aids.

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3 Aquitaine: economic aid census report.
4 Guide to public support in favour of SMEs.
2.3 **Typology of business support services**

The membership of EURADA have drawn up – as exhaustive as possible – a list of examples of services delivered by RDAs.

1. Reception, basic services and information, guidance
   - First contact point
   - Official registration and documentation
   - Dissemination of publications and information packages
   - Promotional and awareness activities
   - Facility procurement
   - Initial diagnosis
   - Guidance
   - Information about legislation

2. Professional information services
   - Information about markets
   - Information about businesses and financial information
   - Technical information
     - standards and certification
     - patents, intellectual property, brands, geographical origin
     - specific fields
   - Entrepreneurship fair

3. Advice and direct support
   - Advice on business plans
   - Business plan and start-up competitions
   - Activity planning
   - Functional advice
   - Monitoring and support measures
   - Mentoring
   - Consulting
   - Enhancing business relations
   - Bringing in direct experience
   - Proof of concept

4. Training for SMEs
   - SME management
   - Start-up
   - Expansion and development
   - Reconversion training
   - Targeted training
   - Business transfers
   - Staff recruitment

5. Finance
   - Investment readiness
   - Shareholder’s equity
   - Loans for specific purposes
     - micro-credits
     - loans with lower interest rates
   - Loan guarantees
     - direct guarantees
     - mutual guarantees
   - Grants and subsidies
   - IPR valorisation
   - Rescue / restucturation grants
6. Business Infrastructure
   - Business incubators
   - Industrial or commercial units
   - Technological parks
   - Telecommunications
   - Logistic, industrial parks and real estate

7. SME-specific strategic measures
   - Conferences and seminars
   - Professional fairs and exhibitions
   - Meet-the-Buyer exhibitions and sub-contracting fairs
   - Trade missions
   - Promotion of networking
   - Development of supply chains
   - Promotion of groupings

8. Innovation and knowledge management
   - Intellectual property (commercial secrets, copyright, industrial design, trade marks, patents)
   - Economic intelligence and market studies
   - Technological watch
   - Technological auditing
   - Technology transfer
   - E-commerce (B2B) and other ICT applications
   - Quality and design management and adaptation to standards
   - Spin-outs and spin-offs
   - Research result commercialisation
   - Aid for inventors
   - Support to prototyping
   - Clusters
   - Networking in the framework of the "open innovation" concept
   - Aid to co-development

9. Advanced financial services
   - Loans without guarantee
   - Matching with business angels
   - Seed capital
   - Venture capital
   - Investment readiness
   - Corporate venturing
   - Reimbursable advance payments for research projects
   - University and research centre spin-off funds
   - Proof of concept

10. Benchmarking

11. Other supports
   - Stimulation of energy savings
   - Adaptation to the environmental rules
   - Inclusion of disadvantaged workers

By analogy with the typology entitled "Major Services Required for the Performance of Enterprises" taken from the European Commission Communication of 4 December 2003 on the competitiveness of the services industry, below is an enumeration of the main support services provided by RDAs and other public intermediary organisations. One finding is that the examples of support services listed in the 11 categories above cover a broader range of intervention fields compared to the eight business functions mentioned in the Commission Communication of 4 December 2003.
<table>
<thead>
<tr>
<th>Position in company</th>
<th>Main Public and Semi-Public Business-Related Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>✓ Advice for business developers and start-ups</td>
</tr>
<tr>
<td></td>
<td>✓ Management consulting</td>
</tr>
<tr>
<td></td>
<td>✓ Auditing and strategic advice</td>
</tr>
<tr>
<td>Human resources</td>
<td>✓ Business management training</td>
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<td></td>
<td>✓ Temporary placement of university students/graduates in SMEs</td>
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<tr>
<td></td>
<td>✓ Observatory on qualifications</td>
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<tr>
<td>Financial intermediation</td>
<td>✓ Regional venture capital funds</td>
</tr>
<tr>
<td></td>
<td>✓ Advice on access to funding sources</td>
</tr>
<tr>
<td>Productive and technical positions</td>
<td>✓ Technology and technical transfer services</td>
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<tr>
<td></td>
<td>✓ Business networks</td>
</tr>
<tr>
<td></td>
<td>✓ Interfaces between universities / research organisations and SMEs</td>
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<td></td>
<td>✓ Support services for patenting and quality and design improvement</td>
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<tr>
<td>Information management</td>
<td>✓ Economic intelligence</td>
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<td></td>
<td>✓ Awareness of innovation in all its forms (products, processes and business models)</td>
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<td></td>
<td>✓ Fostering innovation culture</td>
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<tr>
<td>Marketing and sales</td>
<td>✓ Support for exports</td>
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<td></td>
<td>✓ Assistance in the search for partners</td>
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<td></td>
<td>✓ Participation in fairs and exhibitions</td>
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<td>Transport and logistics</td>
<td>✓ Multimodal transport nodes</td>
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<tr>
<td>Facility management</td>
<td>✓ Incubators</td>
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<tr>
<td></td>
<td>✓ Enterprise real estate, including connection to services of general interest</td>
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<tr>
<td></td>
<td>✓ Technical centres of excellence</td>
</tr>
</tbody>
</table>

2.4 **High Value-Added Support Services**

In the knowledge-based economy, it is increasingly important to encourage public authorities to invest in the provision of high value-added services and in the reinforcement of specialist organisations.

High value-added services can be grouped into eight broad categories (non-exhaustive list):

- the protection of intellectual property rights;
- accelerated commercialisation of research project outcomes;
- detection of dormant projects in research centres and universities as well as large companies;
- improving the quality of demand for finance emanating from SMEs (via investment readiness schemes, business angels networks, etc.);
- boosting the growth (turnover and employment) of businesses accommodated in incubators;
- ensuring that the staff of university / research centre / business and investor interfaces are themselves genuinely entrepreneurial and/or that their remuneration is performance-based;
• appropriation by subcontractor SMEs of management methods that help reassure large principal contractors (6sigma, LEAN, co-development, etc.);

• creation and management of multisectorial or pluridisciplinary platforms in order to boost innovation and applied research.

It has been established empirically that the life expectancy of businesses that have been accommodated in an incubator or have received some form of advice is dramatically improved compared to businesses that have not benefited from this type of services. Businesspersons therefore need to become aware of the fact that access to finance alone is not adequate to consolidate their business in the long run. Investors are also increasingly sensitive to the quality of human resources available in investee businesses. To remedy any weakness in this field, business finance programmes increasingly include the provision of management or business development consulting services as a (pre)condition of or complement to funding.

This tends to be corroborated by statistical studies. For instance, the 670 businesses that received support in the Limousin (F) region between 1997 and 2007 grew faster than others. Indeed, three years into public support, 17.5% of aided businesses had hired additional staff (v. 8.6% of other companies) and their turnover had increased by 28.9% (15.4% among other businesses).

2.5 What is the purpose of public support services?

Public intervention on the business services market is justified when it aims to:

- improve framework conditions;
- address asymmetric information between SMEs and their institutional and competitive environment;
- address market failures;
- improve market solvency;
- improve the ability of businesses to anticipate or absorb change.

Some organisations – notably Directorate General Competition of the European Union – are of the opinion that the main role of the public sector should be to improve the framework conditions of entrepreneurship and therefore to interfere directly only to address market failures, the latter allegedly existing only in cases of (i) inadequate SME access to (financial, innovation advisory, RTD and other) services; (ii) severe information asymmetry on the market or; (iii) excessively high transaction costs for SMEs.

The issue of limiting public intervention to instances of market failures deserves detailed examination to determine as precisely as possible the kind of private investment that is lacking and the cause(s) of this shortage. For instance, we do not believe in the existence of a market failure in the mere absence of adequate amounts of seed capital finance for start-ups. The unadventurous behaviour of private operators on this market segment is justified by the substantial level of risk involved in investment deals. So in this particular case, what is in evidence is not a market failure but rather a market that operates according to its own specific rules. To tackle the issue, public authorities would be well advised – rather than subsidising businesses directly – to take steps to reduce the inherent risks facing businesses at start-up, for instance by funding programmes addressing investment readiness, proof-of-concept, tax exemption for business angel investments or repayable short-term loans as collateral investment alongside the private sector in venture capital funds. Rather than eliminating market failures, direct aid paid to businesses tends to perpetuate them as grants replace private investors instead of encouraging them to change their approach.

Worth recalling is that what creates jobs are profitable and innovative businesses, not strategies, framework conditions or corporate real estate. Regardless of the motives of their intervention, public authorities should be able to demonstrate:

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5 Focal INSEE Limousin nr 36, March 2007.
that support service provision is tailored to business requirements;
that delivery mechanisms bring added value both in view of business requirements and compared to existing schemes;
that financial resource allocation⁶ is commensurate with market value;
synergies between the regional human, social and financial capital and infrastructure and potential beneficiaries;
interactions between the links of the regional supply chain corresponding to the identified failure;
the quality of the marketing plan and the relevance of the information provided to potential users;
the criteria used to improve the scheme management and evaluation system in the case of multi-annual programmes.

The objectives of public subsidies can be summarised as follows⁷:
- jobs;
- investment;
- operation;
- R&D;
- training;
- business development;
- environment;
- rescue/turnaround;
- trade and network coordination;
- exports.

The aid can be generalist or targeted on individual industries or on SMEs⁸.

Worth underscoring is that businesses themselves indicate that their ability to grow depends in ascending order of importance on the following factors⁹:
- access to public and semi-public subsidies;
- innovating and commercialising their RTD outcomes;
- taking on board new technology and other practices;
- maximising the cost of capital;
- access to capital;
- conquering markets or shortening product and service time-to-market;
- marketing their products and services;
- attracting skilled labour;
- improving their management.

Bearing these factors in mind, public intervention should systematically combine financial assistance with non-financial support, the latter in the form of diagnostics and advisory and staff training services.

The table below seeks to illustrate how this recommendation can be applied to the three main business functions: innovation, production and sales.

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⁶ Some EU programmes cofinance only 8-10 projects out of more than 200 replies to individual calls for projects.
⁸ In France, SME aid reportedly accounts for only 10% of total public financial support for business.
⁹ Source: Enquête CROCIS (“CROCIS Survey”), Ile-de-France 2003.
Table 2  Matrix of key business functions and public policy instruments

<table>
<thead>
<tr>
<th>Key manufacturing business functions</th>
<th>Collateral functions</th>
<th>Public policy instruments</th>
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<tr>
<td><strong>INNOVATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market studies</td>
<td></td>
<td>Economic intelligence</td>
</tr>
<tr>
<td>In-house research</td>
<td></td>
<td>Grants and loans</td>
</tr>
<tr>
<td>Contracted research</td>
<td></td>
<td>Grants and loans</td>
</tr>
<tr>
<td>IP protection</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Exploitation of research outcomes</td>
<td></td>
<td>Grants and loans</td>
</tr>
<tr>
<td>Imitation</td>
<td></td>
<td>Economic intelligence</td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
<td>Grants and loans</td>
</tr>
<tr>
<td>Proof of concept</td>
<td></td>
<td>Loans</td>
</tr>
<tr>
<td><strong>PRODUCTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Search for finance</td>
<td></td>
<td>Grants, loans</td>
</tr>
<tr>
<td>Design</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td>Grants</td>
</tr>
<tr>
<td>Localisation</td>
<td></td>
<td>Grants, tax exemptions</td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Purchases</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Sub-contracting</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td><strong>SALES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Branding</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Total Quality Management</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Logistics / Distribution</td>
<td></td>
<td>Grants</td>
</tr>
<tr>
<td>Clustering</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Accounting &amp; Finance</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>After-sales</td>
<td></td>
<td>Advisory services</td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td>Advisory services; Grants</td>
</tr>
</tbody>
</table>

Source: EURADA

2.6 **Support service efficiency**

Comparatively few studies are available on this issue. Politicians tend to focus more on the number or unit cost of new jobs. Therefore, few opportunity surveys are conducted to identify measures to be taken and public authorities very seldom encourage innovation in business support services.

The effectiveness of business support services can be estimated against parameters including:

- The nature of support: finance, assistance or a combination of the two. Generally speaking, the last is most effective. Equally, loans or equity investment in businesses tend to be more effective than subsidies. Loan applications are generally examined in greater detail than applications for subsidies since no profitability requirements whatsoever are attached to the latter.
• The quality of operators. In principle, private operators are more careful to deliver quality services than public providers who in practice are in a quasi monopoly position. However, it may be useful to advise SMEs on how to develop specifications in advance of tendering procedures.

• The delivery methodology. Integrate methods are more effective than ad-hoc (one shot) provision. The provision of advice is more effective than the provision of information as part of a touch-and-go system. Proactivity is always more effective than passiveness. And finally, collective action may be preferable to individual action.

• Cost. Public-private partnerships and incentives for the private sector to take entrepreneurial risks (e.g. in the case of business angels) is more cost effective than traditional subsidies or isolated public intervention.

• The product mix. Support services that combine advisory or audit services with financial support are more effective that funding granted without appropriate advisory service packages.

The effectiveness of public business support services also hinges on governance, on meeting a clearly defined need and on acceptance by the private sector of the organisation delivering the services.

Both the efficiency and effectiveness of public business support services are often questioned. The main criticism relates to the fact that "this support is provided under schemes that are costly, complicated, poorly coordinated and limited in scope". Besides, the report points to poor reckoning with evaluation outcomes among public decision-makers.

Worth adding to this realisation is the report drafted by a group of intellectual property experts who deplore the fact that the services provided by public organisations are often the ones that are least useful to SMEs!

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10 See Rapport de la Cour des Comptes française ("Report of the French Court of Auditors").
11 Pro Inno Europe Paper N° 3 – A Memorandum on Removing Barriers for a Better Use of IPRs by SMEs.
CHAPTER 3  TAILORING SUPPORT SERVICES TO THE REQUIREMENTS OF BUSINESSES

3.1  Typology of business support services

It may be possible to better characterise the provision of business support services by means of an analysis based on the typology of the main market segment categories below:

- **Business categories:**
  - growing businesses;
  - start-ups;
  - entrepreneurial growth businesses;
  - businesses without much potential for growth;
  - businesses undergoing a transition;

- **Business support services addressing different stages of the business lifecycle:**
  - (pre-)commercial stage of innovative concept development;
  - (non-)financial services;
  - infrastructure or intangible services;
  - individualised or shared services;
  - basic or high value-added services;

- **Categories of users involved in delivery mechanisms:**
  - public authorities;
  - intermediary bodies;
  - universities, research centres;
  - private businesses;

- **Stage in the development cycle of a new product or service:**
  - definition;
  - proof of concept;
  - initiation;
  - development/growth;
  - maturity;

- **Delivery methodology:**
  - pilot projects, one shot, multi-annual programmes;
  - calls for tenders or desks/centres;
  - subsidies, repayable short-term loans, guarantees, equity participation, loans;
  - direct or indirect investment or consultancy support;
  - individual offer or common services offer;

- **Support service aims:**
  - supporting the development of low value-added businesses;
  - supporting the development of innovative businesses;
  - supporting the development of entrepreneurial growth businesses;
  - supporting the development of spin-outs/offs;
  - supporting local infrastructure (nurseries, incubators, enterprise real estate, industrial or tech parks, technical centres, etc.);
  - supporting technology transfer and the utilisation of RTD outcomes (patents, licensing, etc.);
  - supporting the coordination of business networks (clusters, clubs, etc.);
  - supporting organisation, market-driven or human resource-related technological development;

- **Support service quality:**
  - basic touch-and-go (information) v. specific (advisory) support services;
  - high value-added services;
Nature of available support:
- financial: subsidies, loans, guarantees, equity participation, tax relief, etc.;
- other: advice, auditing, training, coaching, mentoring, etc.
- networking.

The aims of support service provision – whether public or private – must include:
- reducing the cost of accessing knowledge, research and innovation, whether in terms of capacity, ability or even effort-sharing;
- increasing access to technology and knowledge;
- shortening product/service time-to-market;
- improving the recruitment of talent and trained staff;
- facilitating access to sources of finance and venture capital;
- reducing the risks of developing new products and services, marketing new ideas and even leveraging research outcomes;
- encouraging medium-sized businesses to grow and develop in-house research and development capacities;
- reducing the disadvantages of SME status including size, absence of critical mass, distrust among public procurement contract adjudicators, asymmetrical information (v. principal contractors or equity investors), etc.;
- consolidating barriers of access to regional markets – while complying with fair competition and State aid rules;
- facilitating the incubation of innovative businesses
- stimulating fast growth among gazelles (entrepreneurial growth start-ups).

Figure 1 below illustrates how public authorities can encourage SME take-up of support services.

Business support service provision also needs to maximise networking and accumulation effects that very often allow both the generation of critical masses of talent, skills and knowledge and reduced transaction costs.

**Figure 1**: Public policy promoting the take-up of support services

<table>
<thead>
<tr>
<th>Aims</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging the development of local infrastructure</td>
<td>Incubators</td>
</tr>
<tr>
<td>Encouraging membership of clusters</td>
<td>Technological parks</td>
</tr>
<tr>
<td>Encouraging take-up of high value-added service provision</td>
<td>Technical centres</td>
</tr>
<tr>
<td>Development of and support to intermediary bodies</td>
<td>• Innovation vouchers</td>
</tr>
<tr>
<td></td>
<td>• Shared-cost RDT projects</td>
</tr>
<tr>
<td></td>
<td>• Repayable short-term loans</td>
</tr>
<tr>
<td></td>
<td>• Shared stalls at exhibitions</td>
</tr>
<tr>
<td></td>
<td>• Premiums for recruitment of researchers</td>
</tr>
<tr>
<td></td>
<td>• Investment Readiness programmes</td>
</tr>
<tr>
<td></td>
<td>• Contribution toward coaching and monitoring costs</td>
</tr>
<tr>
<td></td>
<td>• Training vouchers</td>
</tr>
</tbody>
</table>

Source: EURADA
3.2 Innovation in public business support services

In recent years, changes have been in evidence in public business support service design. An illustration of these is provided in Figure 2 below, comparing so-called traditional and new intervention categories.

Figure 2: Innovation in public business support services

<table>
<thead>
<tr>
<th>Traditional types of interventions</th>
<th>New types of intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Awareness and legal framework</td>
<td>• Economic and technological intelligence</td>
</tr>
<tr>
<td>• Individualised services</td>
<td>• Identifying and harnessing businesses’ potential</td>
</tr>
<tr>
<td>• Information services</td>
<td>• Shared services, networking, clusters</td>
</tr>
<tr>
<td>• Grants</td>
<td>• High valued-added advisory services</td>
</tr>
<tr>
<td>• Top-down approach based on the range of available public support services</td>
<td>• Access to finance and venture capital, investment readiness</td>
</tr>
<tr>
<td>• Generic provision (“one-size-fit-all”)</td>
<td>• Bottom-up approach based on a careful analysis of business demand</td>
</tr>
<tr>
<td></td>
<td>• Tailored provision for individual market segments</td>
</tr>
</tbody>
</table>

Source: EURADA

It seems however that the trend described above has not peaked yet. Indeed, the following shortcomings are still in evidence among public business support services, which severely constrain the effectiveness of regional business support service provision systems:

→ excessively fragmented provision due to a plethora of intermediary bodies;
→ absence of integrated provision, of a vision as well as of any analysis based on the public intervention value-chain;
→ poor interpretation and use of the one-stop-shop\(^\text{12}\) concept and lack of integration of the no-wrong-door concept\(^\text{13}\);
→ absence of investment readiness programmes addressing the lack of symmetry between businesspersons and investors, adjudicating authorities, grant influencers, RTD and university circles, etc.;
→ lack of systematic evaluation of public service delivery effectiveness and opportunity costs;
→ mitigated outcomes of programmes focusing on EGCs (entrepreneurial growth companies). Too many companies in incubators remain medium-sized (5-6 staff and a turnover below €5 million);
→ inadequacy of business retention schemes;
→ lack of adequate projects to systematically dig up entrepreneurial and innovative business concepts lying dormant in research labs, universities and medium-sized regional companies;
→ overrepresentation of grant-based provision v. loans, guarantee schemes and adequate seed capital funds and investment capital;
→ lack of support mechanisms for applied research, protection of intellectual property rights and encouragement of branding\(^\text{14}\) and design;
→ embryonic public-private partnership practice when it comes to business support services as well as RTD and innovation infrastructure;

\(^{12}\) One Stop Shops simply represent a concept whereby foreign (i.e. non local) businesspersons or investors can perform in a single place all procedures required to set up and legally operate a commercial enterprise

\(^{13}\) The aim of the “no-wrong-door” concept is to leverage a joint needs evaluation system to guide business persons to the specialist regional organisations that are best equipped to advise them.

\(^{14}\) Branding is either collective (made in ..., geographical indications of origin) or individual (brands owned by businesses).
problematic delivery of support services that match new strategic business attitudes including lean manufacturing\textsuperscript{15}, joint development and drastic rationalisation of subcontractor pools.

Besides, substantial asymmetry seems to be evidence between the values of the business models of public administration and traditional companies and those of innovative businesses, which further complicates the matching of supply and demand. This asymmetry is illustrated in the table below\textsuperscript{16}.

Table 3  Comparison between traditional and innovative business models

<table>
<thead>
<tr>
<th>Traditional companies</th>
<th>Innovative businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public administration</strong></td>
<td><strong>Unpredictable</strong></td>
</tr>
<tr>
<td>1. Predictable</td>
<td>Looking for novelty</td>
</tr>
<tr>
<td>2. Looking for stability</td>
<td>Focus of discovery</td>
</tr>
<tr>
<td>3. Focus on core business</td>
<td>Networked organisation</td>
</tr>
<tr>
<td>4. Hierarchic organisation</td>
<td>Tensions due to creativeness</td>
</tr>
<tr>
<td>5. Hierarchic progression</td>
<td>Efficiency through innovation and</td>
</tr>
<tr>
<td>6. Efficiency through standard procedures</td>
<td>flexibility</td>
</tr>
<tr>
<td>7. Foundation of in-house competences</td>
<td>Combination of in-house and external</td>
</tr>
<tr>
<td>8. Resistance to change and aversion of risk</td>
<td>know-how</td>
</tr>
<tr>
<td>9. Performance is measured in terms of stability</td>
<td>Risk is taken because of incentives to</td>
</tr>
<tr>
<td></td>
<td>change</td>
</tr>
<tr>
<td></td>
<td>Performance is measured in terms of</td>
</tr>
<tr>
<td></td>
<td>innovation</td>
</tr>
</tbody>
</table>

Source : EURADA

There is therefore a need for public authorities to better harness the three basic segments of the business support service provision market, i.e.:

- adjusting offer to demand;
- improving demand quality;
- matching offer with demand.

Illustrations of this are provided in Figures 3 to 6 below, which try to clarify the nature of intervention according to each of the three segments above.

\textsuperscript{15} The method implemented by Toyota: reducing stocks and outstanding debt, subcontractor accountability, JIT, etc.

\textsuperscript{16} This table draws from Creating the Innovation Culture, Langdon Morris, Innovation Labs, 2007.
**Figure 3: Non-financial support service provision**

- Information, economic and technological intelligence
- Corporate real estate, technical centres
- Auditing and diagnostics
- Mentoring and coaching
- Protecting and leveraging intellectual property
- Internationalisation
- Promoting innovation
- University / research centre interfaces
- Business retention
- Training

**Figure 4: Financial support service provision**

- Tax relief
- Risk capital (Business Angels, Seed, Venture Capital, Mezzanine, Spin out)
- Finance (loans, grants, guarantees, Repayable short-term loans, etc.)
- Access to expertise

**Figure 5: Improved demand**

- Networking
- Investment Readiness
- Training to take-up external expertise

**Figure 6: Matching offer with demand**

- Incubation
- Interface
- Cluster, competitiveness centres
- Mentoring and coaching
- Diagnostics
- Local infrastructure

Intermediary bodies: facilitators, catalysts, "No Wrong Door"
Worth noting is that in future, universities will come to play an increasingly important role in all three of the above segments of the business support services market. Indeed, they will be called upon to:

- train talent;
- promote entrepreneurship;
- acquire consultancy expertise;
- generate, leverage and transfer knowledge;
- manage RTD and innovation infrastructure (pre-incubators, laboratories, etc.);
- participate in support schemes (clusters, interfaces, seed capital funds, etc.);
- enhance public-private partnerships (PPPs);
- attract and retain talent;
- contribute to regional influence and marketing abroad.

3.3 **Support services focusing on the requirements of growing businesses**

Higher profits alone can deliver improved business profitability, which requires addressing either prices or sales.

The diagram below progressively needs to become the frame of reference for ex ante evaluation of measures contemplated to support existing businesses or stimulate the development of new ones. Indeed, it seeks to describe the resources needed to achieve the profit and growth objectives that drive all businesses.

**Figure 7: Matching business aims with support services**

![Diagram showing the relationship between business aims and support services](image-url)

Source: EURADA
Worth recalling is that in theory, the recipes of business success are straightforward: cost control, regular product range renewal (i.e. constant product, process and business model innovation), distribution and attention to market (design, functionality, price perception, etc.) and careful marketing expenditure. However, a German study\(^{17}\) clearly shows that despite this apparent simplicity, 93% of innovative business projects fail. The causes of such failures are multiple: development strategies focusing exclusively on technological aspects, lack of market knowledge, inadequate product characterisation, over-engineering, etc.

Obviously, the above figure needs to fit in a more global context addressing the framework regional conditions that have to be in place for business activities to flourish and unique competitive advantages to emerge for regional players.

**Figure 8 : Regional framework conditions for entrepreneurship and innovation**

![Diagram](image)

Source : EURADA

Expressed in operational terms, acceptance of these frames of reference for regional development requires both provision of strong value-added support services and a new approach to the definition of the regional development vision.

\(^{17}\) *Les Echos*, 7 February 2007, quoting IAI survey of 1,200 companies.

\(^{18}\) Entrepreneurship and SME supportive framework conditions

\(^{19}\) Water, energy, transport, RTD, ICT, quality of life, education, health

\(^{20}\) Nurseries, incubators, industrial parks, technological parks, technical/technological centres

\(^{21}\) We have added the "Private investors" component to the three traditional components identified by the literature to define the "Triple Helix" concept
According to a study conducted in Belgium, the expected outcomes of company managers when using business support services include:

- Improved product or service added value;
- Business modernisation;
- Business differentiation v. competitors;
- Adjustment to business environment (i.e. competition) changes;
- Reduced activity-related risks;
- Optimised internal business organisation;
- Increased flexibility;
- Diversified activity;
- Reduced costs;
- The ability to innovate;
- Procurement of information and expertise.

The findings of this survey show a strong correlation with the items listed in Figure 7 above.

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6 PMEKMO.be, 05 January 2007. According to IBM, the term Business Intelligence has two meanings:

- Applications and technologies used to access and process data;
- The availability of information that supports strategic decision-making.
CHAPTER 4  SUPPORTING INVESTMENT IN INTANGIBLE ASSETS

The knowledge-based economy rests on intangible assets. Indeed, company value – including market capitalisation – no longer necessarily depends on physical production tools. These days, value is generated by a number of intangible assets including brand, innovation capacity, closeness to customers and patent exploitation.

This realisation presents public authorities with challenges belonging to three different categories:

a) development of programme or service strategies to stimulate business investment in intangible assets;

b) investment in the reinforcement of businesses’ own intangible assets;

c) stimulation of regional knowledge production, utilisation and internationalisation.

For memory, intangible business assets include:

- **Human assets:**
  - staff education and training levels;
  - support for staff in-service training;

- **Knowledge assets:**
  - RTD activities;
  - patents and other rights deriving from intellectual property: brands, designs, copyright, trade secrets;
  - innovation capacity (product, process and business model);
  - licences, franchising agreements;
  - software;
  - expertise;
  - knowledge utilisation;

- **Process assets:**
  - engineering;
  - governance;
  - database management;
  - remuneration of innovative ideas;
  - production or import quotas;

- **Customer assets:**
  - marketing and distribution networks;
  - customer-related services;
  - customer loyalty plans or client/supplier lists.

Worth underscoring is that a number of companies are “going intangible” in the sense that they no longer own any real estate (Apple, Accor Hotels, Mariott, etc.). The resources these companies free up in doing so are invested in branding, design, management, international marketing, intellectual property and know-how activities that all generate added value. Traditional business support schemes will progressively need to adjust to the requirements of this new business model.

Public authorities can help businesses grow their intangible assets by taking action in a number of areas, e.g.:

- technological, commercial and competitive watch and intelligence;
- systems to strengthen creativeness, design and different intellectual property protection tools;
- innovative public policy delivery and evaluation methods;
- know-how regarding the establishment and coordination of networks and public-private partnerships;
- transnational contacts;
✓ decompartmentalisation of administrations, private sector, universities and intermediary bodies;
✓ provision of permanent training tools in tune with strategic regional industries;
✓ ability to coordinate observatories and foresighting efforts;
✓ designations of geographical origin.

To do this, they can rely on interfaces, networks, industrial competence centres, industrial prototyping and product development and testing facilities as well as intangible assets utilisation centres.

Figure 9 below seeks to introduce the mechanisms and conditions needed to develop or leverage knowledge within businesses, i.e. their most important intangible assets. Understanding this process should enable public authorities to deploy support services that are appropriate, able to reinforce the competitive advantages of businesses or the regional attractiveness for knowledge-intensive companies.

**Figure 9**: Mechanism to develop and leverage business knowledge and potential backing from public business support services

<table>
<thead>
<tr>
<th>Business and knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation</td>
</tr>
<tr>
<td>External</td>
</tr>
<tr>
<td>Incentives</td>
</tr>
<tr>
<td>Reinvestment of profits or turnover</td>
</tr>
<tr>
<td>Grants through public RDT programmes</td>
</tr>
<tr>
<td>RDT contracts</td>
</tr>
<tr>
<td>Joint research</td>
</tr>
<tr>
<td>Crowdsourcing</td>
</tr>
<tr>
<td>Open innovation</td>
</tr>
<tr>
<td>Innovation from knowledge developed in-house</td>
</tr>
<tr>
<td>Innovation from technology transfer</td>
</tr>
<tr>
<td>- licensing</td>
</tr>
<tr>
<td>- patenting</td>
</tr>
<tr>
<td>- joint venture</td>
</tr>
<tr>
<td>- joint development</td>
</tr>
<tr>
<td>Through marketing of knowledge developed in-house</td>
</tr>
<tr>
<td>Networking</td>
</tr>
<tr>
<td>Interfaces technology transfers</td>
</tr>
<tr>
<td>Clusters</td>
</tr>
<tr>
<td>Public supports</td>
</tr>
<tr>
<td>Human resources</td>
</tr>
<tr>
<td>Access to infrastructure</td>
</tr>
<tr>
<td>Access to knowledge</td>
</tr>
<tr>
<td>Access to expertise</td>
</tr>
<tr>
<td>Technological intelligence</td>
</tr>
<tr>
<td>Financing</td>
</tr>
<tr>
<td>Intellectual property rights</td>
</tr>
<tr>
<td>Networks and partnerships</td>
</tr>
<tr>
<td>In-house innovation culture</td>
</tr>
<tr>
<td>Financing</td>
</tr>
<tr>
<td>Intellectual property protection</td>
</tr>
<tr>
<td>Economic intelligence</td>
</tr>
<tr>
<td>Access to prototyping centres</td>
</tr>
<tr>
<td>Financing</td>
</tr>
<tr>
<td>Expertise in intellectual property rights</td>
</tr>
<tr>
<td>Technological and economic intelligence</td>
</tr>
<tr>
<td>Cellule de valorisation</td>
</tr>
<tr>
<td>- brevets</td>
</tr>
<tr>
<td>- licences</td>
</tr>
<tr>
<td>Networking</td>
</tr>
<tr>
<td>Interfaces technology transfers</td>
</tr>
<tr>
<td>International cooperation</td>
</tr>
</tbody>
</table>

Source: EURADA
There is a need for innovation in delivery to back the evolving paradigm of support service provision described above.

Thus, innovation can take one of the following forms:

- use of public procurement to steer innovation;
- organisation of investment readiness sessions;
- use of intermediary body systems based on the “no-wrong-door” principle;
- reinforcement of platforms of key organisations and interfaces between them.

In theory, effective delivery of innovative approaches of this type is possible through a clustering policy, provided that basic cluster features are reflected, including:

- good governance;
- maximisation of resources;
- SWOT analyses of industries to be clustered;
- critical mass of players;
- effective cooperation between the public and private sector and knowledge development or utilisation centres.

Belonging to one or more networks – and the role played in them – is also an important aspect of individual businesses’ intangible assets.

While the focus of regional or local intervention tends to be on clusters and competitiveness centres these days, other networking formats can deliver interesting added value for businesses.

Networks are considered tools to develop synergies among key stakeholders in an attempt to generate competitive advantages or exchange information to strengthen business competitiveness.

Networks can be formal – i.e. managed by a catalyst – or completely informal. They can be focused or open. They can also be horizontal (i.e. take the form of “Michael Porter”-type clusters) or vertical (industrial research value chains or systems).

In the case of specific industrial networks, the public sector should generally act as a facilitator. It may also refocus its policies and supports as well as its delivery mechanisms to better meet the needs of network members, thereby addressing market failures from the directions of both supply and demand.

Most effective networks are characterised by the involvement of both public and private stakeholders – though their leadership is often in the hands of a representative of the private sector or an intermediary organisation.

Effective networks also share the following features:

- They generate powerful magnetic attraction between the different nodes by facilitating the circulation of knowledge among network members. They help the chemistry amongst their membership.
- They are managed by a good “steering team” in charge of delivering the strategy and action plan, coordinating an intranet and evaluating performances.
- They perfectly understand the needs of businesses and know how to provide effective support services on a daily basis.

Many different types of networking approaches in support of small and medium-sized enterprises are possible, including:

- business clubs;
- business angels networks;
- regional consensus-building teams;
- coaching and monitoring pools (role models);
- shared or common services networks;
- communities of practitioners;
- networks of experts.
INTRODUCTION

Access to finance often remains one of the key factors in setting up and developing SMEs. It is an issue that is common to all European Union Member States, and possibly one that also affects a number of States in the USA. It is increasingly recognised that SME access to finance is hampered by a number of market failures. But as opposed to the USA, the European Union does not have a programme equivalent to that operated by the SBA – United States Small Business Administration).

Europe is characterised by its very diverse cultural context. This diversity is also apparent in the fields both of entrepreneurship and corporate finance. Clearly, the European Union can currently be described as a dual world with an Anglo-Saxon and a Latin component. Differences are measurable in terms of:

- the degree of acceptance among businesspersons of third-party investment in their company;
- the variety of funding sources available;
- the level of maturity of the different market segments that constitute the business finance value chain.

Public authorities in Europe also share issues relating to the formulation of programmes that actually address genuine equity gaps, and the lack of sufficiently varied funding procurement channels available to SMEs. This was highlighted by Professors C. Mason and Harrison in a paper published in the October 2003 issue of Regional Studies. Indeed, they argued convincingly that when the UK’s DTI (Department of Trade and Industry) and RDAs (Regional Development Agencies) set up regional public venture capital firms using a supply-based approach, they did not manage to address the very real equity gap issue because they overlooked a number of aspects relating both to the demand side and to value chains. To be really effective, the programme should also have considered:

- “initiatives to improve the demand side of the market, including a programme which helps business to become investment ready, better funding of the present system of business angels networks to enable them to more effectively address the inefficiencies in the informal venture capital market and extending eligibility for co-funding to organized angel syndicates in order to access classic venture capital skills”.

For entrepreneurs, it is important to understand that all forms of finance do not have the same aims. Similarly, the motivations and criteria of different funding parties will vary according both to the type of product presented and the level of risk linked to it. Therefore, business plan quality and content, as well as its presentation to potential investors need to be adjusted to their respective specific requirements. This explains the Anglo-Saxon expression “all money is not the same”.

Appropriate ways of addressing potential investors’ expectations is something would-be investees can prepare for by attending an investment readiness programme or by passing through an incubator, hoping that some of them will one day become SME growth accelerators.
CHAPTER 1  THE MARKET

1.1 Definitions of funding sources

• **Business angels (informal venture capital):** private individuals who invest part of their estate in start-ups in the form of venture capital and also contribute their personal managerial expertise.

• **Business Angel Networks (BANs):** standing regional platforms that promote the matching of business angels with potential investees.

• **Buyouts:** existing investors’ shares in a business are bought by the latter’s own management team (MBO – Management Buy Out) or by another management team supported by a venture capital fund.

• **Corporate venturing:** venture capital invested by existing firms for the purpose of funding innovative businesses set up by their own staff or active in industries considered of strategic importance.

• **Development or expansion capital:** financing provided for the growth and expansion of a company, which may or may not break even or trade profitably. Capital may be used to: finance increased production capacity; market or product development; provide additional working capital.

• **Early stage (or start-up) finance:** equity invested in businesses that are past research and development but need additional funding to market their products and services.

• **Equity:** ownership interest in a company, represented by the shares issued to investors.

• **Expansion:** growth, bridging or restructuring capital.

• **Factoring:** a technique whereby SMEs sell invoices to specialised firms.

• **Financial package:** a combination of different funding sources.

• **Grants:** subsidies paid – without an obligation to refund—by public authorities to companies investing in a region for the purpose of facilitating their establishment or expansion.

• **Investment readiness:** set of advice given to entrepreneurs in order to better prepare them to meet with potential investors.

• **Leasing:** hire-purchase of capital goods.

• **Loans and debts:** the main sources of funding for SMEs.

• **Mezzanine:** combination of equity and loans (in form of bonds). The bonds can be converted in shares or reimbursed in cash.

• **Proof of concept:** finance provided to a researchers’ team to support the validation of their business ideas. Often, the financial instrument takes the form of a grant and subordinated loan.

• **Quasi-equity investment instruments:** instruments whose return for the holder (investor/ lender) is predominantly based on the profits or losses of the underlying target company, are unsecured in the event of default and/or can be convertible into ordinary shares.

• **Replacement capital (also called secondary purchase):** Purchase of existing shares in a company from another private equity investment organisation or from another shareholder or shareholders – an investor buys another’s stake.

• **Risk capital:** Equity and quasi-equity financing to companies during their early-growth stages (seed, start-up and expansion phases) in the hope of a return on investment (ROI) that is both large and speedy, on a par with the level of risk taken. It includes: (1) informal investment by business angels; (2) venture capital; (3) alternative stock markets specialised in SMEs and high-growth companies.
• **Seed capital**: Financing provided to study, assess and develop an initial concept. It precedes the start-up phase. Seed capital is required to fund a business project before the product or service is marketed. Seed capital is often pivotal in high-tech projects to allow businessespersons to conduct surveys as well as research and development on prototypes that will become companies’ core business.

• **Start-up capital**: Financing provided to companies for product development and initial marketing. Companies may be in the process of being set up or may already exist, but have not sold their product or service commercially and are not yet generating a profit.

• **Venture capital**: Investment in unquoted companies by investment funds (venture capital funds) that, acting as principals, manage individual, institutional or in-house money. It includes early-stage and expansion financing, but does not include replacement finance and buy-outs.

1.2 SME finance players

The market of enterprise financing includes many different types of players23 who fit roughly into three main categories:

I. **Venture capital players, including**:
   - business angels and their networks and syndicates;
   - regional venture capital funds;
   - corporate venturing firms;
   - match funds (as set up by DTI’s Small Business Service);
   - incubators;
   - clusters;
   - stock exchanges;
   - open-end innovation investment funds.

II. **Loans and debt with**:
   - banks and other financial organisations;
   - suppliers – the cheapest source of finance are the easy terms of payment they may grant!

III. **Other sources, including**:
   - government grants;
   - business competition prizes;
   - factoring;
   - leasing;
   - refundable advances;
   - commercial credit;
   - Export credits.

1.3 SME finance market segmentation

I. **Entrepreneurs’ own assets as well as their families’ and friends’**
   - entrepreneur's savings;
   - profit reinvestments;
   - friends and family savings;
   - second mortgage;
   - personal credit cards;
   - customer advance;
   - delay of payment;
   - premises sharing;
   - employing relatives at below market salaries.

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23  Source (among others): Envestors – A simple Guide to raising finance up to £1m, www.envestors.co.uk
II. Start-up

- seed capital fund;
- loan on trust (i.e. without interest and/or guarantee);
- university and research centre spin-off funds;
- micro-credits;
- (semi-)public start-up and innovation funds;
- public subsidies;
- repayable short-term loans;
- proof of concept.

III. First financial rounds

- business angels;
- seed capital funds;
- bank loans/debt;
- guarantee schemes;
- (semi-)public investment funds;
- regional public venture capital;
- public subsidies;
- corporate venturing.

IV. Second financial rounds

- private venture capital;
- bank loans;
- stock purchase warrants;
- mezzanine.

V. Other financial rounds

- Initial Public Offer (IPO) – listing;
- bond issues;
- convertible bonds;
- leasing;
- factoring;
- franchising.

If we cross the two above mentioned datas (providers and tools), we can notice that in a region there might be either a fragmentation of the market, or an overlapping of competences which give entrepreneurs the feeling that they are lost in a jungle. Some agencies try to overcome the situation by providing intermediation services or by developing an e-portal website aiming at helping SMEs to access useful information about the market segments.

Many experts have tried to link the sources of capital needed by SMEs according to their stage of development. The following figure illustrates that:

- the different funding sources available on the market are often tailored to a specific stage in the business lifecycle;
- individual funding sources are often adjusted to the development cycle of businesses, which needs to be based on individual SMEs optimum turnover potential.
1.4 **Typical amounts invested by individual funding sources**

As evident from the Table 4 below, the respective amounts that entrepreneurs can expect from the different categories vary according to the type of financial product and player involved:

Table 4

<table>
<thead>
<tr>
<th>Products</th>
<th>Venture capital investment range (in €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans without guarantee or interest</td>
<td>5,000 – 15,000</td>
</tr>
<tr>
<td>Micro-credits</td>
<td>3,000 – 30,000</td>
</tr>
<tr>
<td>Business angels</td>
<td>25,000 – 250,000</td>
</tr>
<tr>
<td>Seed capital</td>
<td>300,000 – 1,500,000</td>
</tr>
<tr>
<td>Early-stage finance—Start up</td>
<td>500,000 – 2,000,000</td>
</tr>
<tr>
<td>Venture capital</td>
<td>2,000,000 – 50,000,000</td>
</tr>
<tr>
<td>IPO</td>
<td>35,000,000 - 329,000,000(^{24})</td>
</tr>
</tbody>
</table>

\(^{24}\) World Federation of Exchanges. Average amount of equity raised by newly-listed companies
1.5 **The equity paradox**

We often hear and read that on the one hand, investors have money but don’t find enough good projects, and, on the other hand, that entrepreneurs don’t find enough funding sources to finance their project (which by essence are good ones).

Who is right?

It seems that the offer of risk capital is there but that not enough equity is dedicated to seed or early stage.

EVCA (European Venture Capital Association) annual reports show that in general funds leverage more financial means than they invest. In Germany, a study launched among 40 business angels in the first quarter of 2004 showed that only one quarter of those angels had invested more than 25% of the money they intended to invest.

If the supply of capital is not considered as the main obstacle of that market, the problem may come from the quality of the demand.

The demand problem can be classified in 3 fields:

- asymmetric information between the entrepreneurs’ and investors’ worlds;
- inefficient preparation of entrepreneurs willing to meet or meeting investors;
- a different perception of the innovativeness of entrepreneurs project.

1.6 **Tailoring business plans to investor requirements**

Once it is accepted that not all funding sources are equivalent in nature, it must also be recognised that it is essential for entrepreneurs to fully grasp the criteria whereby investors decide to invest or not. The table below seeks to list major criteria used by different types of investors as part of due diligence, i.e. the process of evaluating prospective deals.

The table below provides a succinct introduction to different types of capital suppliers and their criteria.

**Table 5** **Priorities of SME equity/loan suppliers**

<table>
<thead>
<tr>
<th>Suppliers of capital</th>
<th>Criteria for accessing funding sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family, Friends and Fools</td>
<td>• Personal relationship based on trust</td>
</tr>
<tr>
<td>Business angels or informal investors and spin-off corporate venturing</td>
<td>• Meeting or matching of individual entrepreneurs with business angels</td>
</tr>
<tr>
<td></td>
<td>• Atmosphere of trust between individuals</td>
</tr>
<tr>
<td></td>
<td>• Credible business plan in the eyes of the Business Angel</td>
</tr>
<tr>
<td></td>
<td>• Good management team</td>
</tr>
<tr>
<td></td>
<td>• Fiscal incentives</td>
</tr>
<tr>
<td></td>
<td>• Market knowledge of the entrepreneur</td>
</tr>
<tr>
<td></td>
<td>• Availability of exit route</td>
</tr>
<tr>
<td></td>
<td>• Return on investment (capital gain)</td>
</tr>
<tr>
<td>Banks</td>
<td>• Availability of guarantees or collateral</td>
</tr>
<tr>
<td></td>
<td>• Perceived ability to repay the loan</td>
</tr>
<tr>
<td></td>
<td>• Company track record</td>
</tr>
<tr>
<td></td>
<td>• Rating</td>
</tr>
<tr>
<td></td>
<td>• Good management</td>
</tr>
<tr>
<td>Repayable short-term loans</td>
<td>• Innovative nature of business projects</td>
</tr>
<tr>
<td></td>
<td>• Business plan quality</td>
</tr>
<tr>
<td></td>
<td>• Management team</td>
</tr>
<tr>
<td>Venture capital and Financial corporate venturing</td>
<td>• Business plan credibility</td>
</tr>
<tr>
<td></td>
<td>• Business plan with patent technology</td>
</tr>
</tbody>
</table>
• Track record (over previous years)
• Ability to grow fast and deliver quick ROI
• Management team quality

Public funding
• New jobs
• Investment in productive tools

Guarantees
• Stamina as well as technical and financial skills/abilities

Unsecured free of interest loans (loans on trust)
• Business plan credibility
• Readiness to cooperate with a tutor

Seed capital funds
• Business plan quality
• Perception of the innovative nature of the project
• Good management
• Intellectual property
• High growth potential
• Government tax policies

Corporate venturing
• Innovative nature of the project in relation to the company’s core business
• Industry-specific usefulness of the project, in particular from a technological standpoint
• Business plan quality
• Good management
• Tax incentives

Institutional investors
• Business plan
• Intellectual Property (IP)
• High growth
• Good management
• Tax incentives from government

New capital markets
• Viability and consolidation
• At least three years in existence
• Positive results at least once within twelve months prior to application
• More than €1.5 million in shareholder’s equity
• Ability to publish quarterly results
• Public recommendation by analyst
• Positive media attention
• Government tax policies
• Capable and experienced management team
• Prominent Board
• Experienced team of financial, legal and underwriter advisers
• New business concept
• Large market share
• Record of high growth or high growth potential

Proof of concept
• Innovation
• Management team
• Entrepreneurship
• Commercialisation of intellectual property

1.7 The equity gap

In general, a financial gap refers to a situation where firms that would merit financing cannot get it due to market imperfections. A specific case of financing gap is the equity gap, the lack of provision of private equity investments in the early stage of a firm’s growth. The reasons for the existence of finance gaps can be linked either to the insufficient supply of funds or to inadequacies on the demand size. The gap can go from an investment size of less than

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25 DG Entreprise and Industry, Expert group on best practices of public support for early-stage equity finance, April 2005
€100,000 to over a million depending on the region or the country. In the UK the gap has been estimated to be between €400,000 and €3,000,000. For Germany, that gap extends to €5,000,000.

Some people suggest that the equity gap is not a market failure as “SMEs find it hard to raise capital because capital markets understand only too well that many SMEs go bust and the survivors do not provide an adequate return for this risk. This is not market failure, this is the market working efficiently”.

Regardless of the opinion of these experts, it is generally accepted at EU level that there are four types of structural gaps in the SME finance cycle:

- insufficient operators in the seed capital segment;
- insufficient investors to finance the seed stage of SME development;
- excessively fragmented venture capital markets;
- insufficiently fluid SME stock markets.

This phenomenon is illustrated in the graph below.

Graph 7 Problems in the financing chain

Source: Presentation by Vesa Vanhanen (DG Enterprise and Industry) at the EASY Seminar in Ljubljana on 19.5.08

26 Cf. Andrew Carter and David Walburn: A case for excluding public policy programmes in support of SMEs from European Union State Aids controls, September 2005
27 Presentation by Vesa Vanhanen (DG Enterprise and Industry) at the EASY Seminar in Ljubljana on 19 May 2008.
CHAPTER 2 SMEs PATHWAYS TO FUNDING AND FINANCE VALUE CHAIN

As indicated in Chapter 1, not all funding sources have the same objectives, nor do they all address the same situations and stages in the business development cycle.

This realisation should guide both business developers’ efforts and the formulation of policy that promotes SME access to finance.

Mastering funding pathways and/or the finance value chain evidently facilitates SME access to funds, as it tends to either reduce the asymmetry between information available respectively to entrepreneurs and investors, or tends to ensure that the most suitable funding sources are available to regional SMEs in a given area. Of course, “facilitating” does not necessarily mean that it becomes easy!

2.1 SME pathways to funding sources

The following pages illustrate the decision path that businesspersons looking for the most appropriate funding sources should follow. It includes five key parameters in the quest for third-party finance:

- business plan robustness;
- accepting or rejecting new shareholders;
- availability of personal guarantees;
- product/service market penetration potential;
- expected amount of financial sourcing.
HAS YOUR BUSINESS PLAN BEEN ASSESSED AS ROBUST BY A SPECIALISED ORGANISATION?

YES

Are you prepared to accept third-party shareholders in your SME?

YES

You should consider asking for the provision of:
- specialised advice
- (pre-)incubation services
- business development funding
- entrepreneurship training
You can enter a business plan or business development competition

NO

Are you ready to meet potential investors?

NO

Attend an investment readiness training course

YES

Get in touch with:
- A bank to secure:
  - a loan
  - a financial lease
  - micro-credit
- Public authorities to apply for subsidies, including in the form of reduced interest rates
- A factoring corporation

Do you have personal guarantees?

YES

NO

Contact an organisation that provides:
- guarantees
- loans on trust
- subsidies
IS YOUR PRODUCT / SERVICE READY FOR THE MARKET?

NO

Check the existence of support from:
• innovation grants
• incubation
• technology centres
• seed capital firms
• public authorities
• universities and technological parks

BANKS
If banks say no

YES

How much equity / money do you expect to need?

Up to € 250,000
Contact:
• a business angel
• a regional business angel network
• a corporate venturing firm
• a local financing company

Also check the attractiveness of your project – as adequately funded – with:
• banks
• guarantee firms
• public authorities to secure subsidies and grants
• venture capital funds

€ 500,000 – € 1,500,000
Contact:
• a business angel syndicate
• a seed capital or other public or private fund specializing in start-ups
• a regional public equity participation fund
• an industrial reconversion company

Finally, consider:
• a MBO (Management Buy-Out)
• an IPO (Initial Public Offering)

Over € 3,000,000
Contact:
• a public or private venture capital firm
• a regional equity participation fund
• an organisation that specialises in bond issues

Source: EURADA, December 2003

Ranges included in the box answering the question “How much venture capital do you expect to need?” (<€250,000, €250,000–1,500,000 and >€3,000,000), are of course arbitrary.
2.2 **The regional finance value chain**

It is increasingly evident that the different SME finance providers act complementarily and should link up to form a regional/local value chain.

Value chains can be flowcharted as follows:

Graph 9  **Ideal capital provision value chain**

A number of intermediaries and regional authorities that are not in a position to fully implement the business finance value chain in their respective regions propose a range of financial products that seek to form a smaller value chain to meet one or more of the types of needs expressed by SMEs, or to specialise in niche markets that are not targeted by private finance operators.

The challenges facing the management of such a value chain include:

- adequate funding provision for specialised funds (seed, venture, etc.): when it comes to value chains, critical mass is a key success factor;
- the availability of professional fund managers: their wages are generally substantially higher in large urban centres than in remote areas, which means that some regions may find it difficult to attract talented managers;
- market fluidity, i.e. the possibility for individual investors to sell their stake whenever they want at an affordable cost: this means ensuring that each link in the value chain provides the raw material for the next one. Exit opportunities are also important to allow investors to materialise their return on investment through capital gain for instance and then to
reinvest in new projects. The worst situation for an investor is to be stuck for an unexpected amount of time in a single investment.

- networking and partnership. This is needed both between the fund providers but also between those organisations and SME support organisations. SME support organisations have an important role to play in the investment readiness of entrepreneurs’ proposals. Managers of the French seed capital fund Cap Decisif claimed in a press interview to Les Echos dated 30.6.04 that: “It’s not easy to find good candidates. There are problems of the format in which we receive the projects. This should be the work of incubators, but in practice very few have the competences required. Moreover they are on a quantitative track and not a qualitative one”.

The example of Rhône-Alpes (F) below shows how in a region the financial and non financial instruments are complementing one another according to the life cycle of the enterprise and on the type of enterprise. The chart drawn up by Rhône-Alpes Création is interesting in a number of ways as it introduces and draws a parallel between:

- different funding sources available to SMEs;
- average amounts available from individual funding sources;
- advice services tailored to individual funding sources.
High-tech PROJECTS (strong potential)

"Seed capital" - National (thematic) (I Source, Emertec, BioAm, …) - Regional (Amorçage Rhône-Alpes)

"Business development venture capital" - National (thematic) (I Source, Emertec, BioAm, …) - Regional (Amorçage Rhône-Alpes)

"Réseau Entreprendre" (Loans on trust + Sponsorship)

"ARJE" (Regional repayable short-term Loans for new businesses – 1-5 years)

"Local platforms" (Loans on trust) Local initiative platforms ADIE

"P C E" (BDPME loans)

"Mille et Un Talents" (Regional grants)

Source: Rhône-Alpes Création
2.3 **Financing technology SMEs**

In a knowledge economy the support to high-tech start-ups becomes a crucial issue. Most of the financial players have good reasons to be reluctant to provide finance to such enterprises because:

- entrepreneurs have no track record;
- investors have not necessarily the skill to assess the technology;
- time to market might be very long;
- enterprises have difficulties to valorise their intangible assets, i.e. their intellectual property rights, to in order to obtain bank loans;
- innovation is a risky business.

To overcome these difficulties, specific support programmes such as "Proof of Concept", "Reimbursable Advance Payments", etc. have appeared.
CHAPTER 3 ENTREPRENEUR MENTORING

3.1 Investment Readiness

This Anglo-Saxon concept, originally developed by the Department of State and Regional Development of the State of Victoria, Australia, emerged from the realisation that the information submitted by entrepreneurs to investors in the hope of convincing them to finance their project did not necessarily match the data that the latter required and expected.

Typical investment readiness programmes generally include the following five elements:

• critical business plan analysis;
• knowledge of funding sources;
• understanding of the timing of, and amounts to be expected from, funding applications (not all funding is the same);
• perceiving the needs and expectations of different types of investors – business developers need to demonstrate that they are “good risk” and that investors can actually expect a healthy ROI;
• training in submitting business projects to any and all kinds of potential investors.

In addition to the above, investment readiness training also needs to address notions including exit routes and shareholder agreements. The latter should notably discuss items including:

• the balance of power;
• exit clauses;
• release clauses.

In the UK, Exemplas implemented a similar programme called "Fit 4 Finance", focusing around the following three types of action:

• awareness seminars on the concept of “what funding sources exist?”
• “guidance panels” comprising representatives of a bank, venture capitalist, business angel, SME consultant, etc.
• “after sales” services, i.e. advice after seminars as well as before and after guidance panels.

It is incumbent upon public authorities concerned with providing regional SMEs with an access to funding sources to also develop and provide investment readiness services on top of financing tools. This type of service is one of the solutions to increase the quality of projects submitted to investors.

3.2 Proof of Concept

Funding provided to a research team, which has a great potential to become entrepreneurs, in order to help them to develop their business idea.

The funding may take the form of grants, loans, quasi-equity or equity. SITRA (FIN), in partnership with TEKES (FIN), offers a package of grants and equity. The amount provided ranges from €20,000 to €70,000. In this case SITRA invests in subordinated loans and TEKES provides grants.

In Scotland, Scottish Enterprise has put in place a “Proof of concept” scheme which in the first years of implementation (2004-2005) helped the creation of 17 new enterprises. This scheme was based on the following tools:

• €300,000 per project of maximum 2 years;
• the entrepreneurial project must include representatives of higher education organisations and a marketing team;
• the university keeps the IPR rights.
3.3 Areas for improvement

The aim of investment readiness and proof-of-concept schemes is to ensure that all fundamental requirements of future businesses are under control in order to maximise their chances of success and hence their return on investment.

In general, five broad categories of parameters are the subject of attention and advice:

- product or service;
- market;
- management team;
- finance;
- business model.

Some coaches use spider diagrams to visualise areas for improvement. The diagram below is used by Sally Goodsell of Finance South East (UK) in delivering her investment readiness programme.

3.4 Awards and sponsorship

Public authorities sometimes reward business development either in kind or with small amounts of money. The French ministry for R & D has made available along with the OSEO €30 millions in 2004 to reward 182 innovative projects. Rewards were given to three types of projects:

- emerging ideas. Maximum €45,000 of grants. 99 projects supported;
- ideas in development. Maximum €450,000 of grants. 83 projects supported;
- special awards.

The funnel effect of this scheme is as follows:

- 1402 files;
- 333 projects assessed;
- 182 projects awarded.
CHAPTER 4  LOANS

4.1  Bank loans

Bankers are undoubtedly the most important link in the business finance chain. How could it possibly be different when the number of companies attracting the attention and interest of other funding sources is known with a fair degree of certainty not to exceed 25,000? However, bankers seem to be the black sheep in the SME finance cycle.

Significant differences exist across 28 European countries when it comes to the use of bank loans. In some, practically all SMEs have one or more bank credit lines going at any given time, while in others this is true for only 70% of them. According to a survey conducted by the European SME Observatory, 60% of sampled SMEs are up to €100,000 in debt vis-à-vis their bank, 16% are in the red for €100,000–500,000, 3% for €500,000 – €1 million, 1% have more than €1,000,000 in bank debt, and 20% confess not knowing how heavily they are indebted to their bank(s)!

The same survey shows that 60% of European SMEs have applied for a new loan in the last three years. While the vast majority of them obtained the amount they applied for, 13% of SMEs were denied a new loan by their bank because it:

- considered guarantees to be inadequate;
- was not satisfied with the overall businesses performance;
- deemed the information supplied to be insufficient.

In Europe, all specialists agree that the vast majority of SMEs’ own funds are inadequate and that undercapitalisation is the main source of failures.

Bank loans are often linked to tangible guarantees, though bankers themselves insist that: “loans are never granted on the basis of guarantees. Loans are guaranteed from a company’s net assets: capital, reserves, reported results and capital subsidies, as well as the entrepreneur’s level of commitment through personal guarantees”.

There are several types of banks (commercial, savings, cooperatives, public, ...) which are more or less friendly to SMEs and propose tailored solutions.

Commercial (or trade) credit is one of the main sources of short-term finance for categories of businesses including micro businesses, small enterprises and start-ups. It is an instrument available to SMEs when:

- banks do not wish to finance them;
- they want to avoid direct banking costs;
- they are put off by the complexity of bank credit;
- they lack in-house financial competences.

There is an extremely wide range of banking products available to SMEs, namely:

- soft loans;
- variable and fixed rate loans;
- credit line;
- capital investment loans (long term);
- mezzanine.

Banks can also provide special conditions to support the business transfers.

In late 2003, the French group Banque Populaire launched EXPRESS SOCAMA, a scheme granting loans without personal security of up to €25,000, repayable over a maximum of three years. In 2005 this bank launched another scheme for the same purpose in the form of a loan of maximum

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28 European SME Observatory, 2003 n°2. SME access to finance:

29 See interview of M. J. Thumelaire, manager in charge of SMEs with ING (B), in l’Echo, 29 October 2003
100,000 € subject to the fact that the entrepreneur has to provide 25% of the loan with a personal guarantee.

Some banks (namely in the UK) are increasingly interested in ways of providing loans for innovative businesses. This is mainly done through training and appointing "technology banking managers". Barclays Bank's Cambridge branch also works very closely with innovative entrepreneurs. HSBC has examined some of the products developed by banks operating in innovative US regions such as the Silicon Valley, the Research Triangle in North Carolina, the Boston region, etc., including "venture leasing" or "intellectual property valuation guarantee" but does not offer them (yet?) to its client businesses in the UK.

Banks generally specialise in the provision of three types of financial business needs:

- cash needs for working capital;
- growth and expansion;
- acquisition of fixed assets.

### 4.2 Small non-banking loans (risk sharing) - Loan on trust

This instrument is very well developed in France and is based on 241 platforms grouped in the "France Initiative" network.

This initiative started in 1985 under the business model: "support the creation of enterprises thanks to free interest loans on trust aiming at helping those enterprises to borrow money from banks".

In average the loan on trust given to an entrepreneur is €5,000.

Recently some platforms have specialised in loans for innovative technology SMEs.

These platforms mobilise regional professionals (territorial authorities, enterprises, institutional operators...) willing to contribute to the development of economic initiatives and of new jobs. They aim at mobilising funds in the form of free interest loans without guarantees for financing the creation of local enterprises. The loan is completed by a mentoring and coaching scheme for the entrepreneur. The coaching generally lasts for three years. It is implemented through the mobilisation of the managers of local enterprises. Loans range from €5,000 and €10,000. 15% of loans on trust are completed by a bank loan at the creation stage. In average, €7,165 of loans on trust allow to get €34,900 of bank loans.

In the UK many CDFIs (Community Development Finance Institutions) operate to provide between €1,500 and 75,000 to local enterprises. In general, the cost of such finance is higher than the current interest rate of the market, as the fund takes a higher risk than commercial banks.

In Pembrokeshire (Wales, UK) a lottery has been created in order to collect funds to be invested in the form of loans to local entrepreneurs or enterprises in order to create or maintain jobs.

In place since 1993, the lottery was able to support 100 enterprises for a total amount of 1.3 million Sterling Pounds (approx. €2.1 million) and so create or save 300 jobs.

The lottery runs as follow:

- each member of the lottery plays £1 per week. Currently nearly 7000 people are members;
- the winner receives £2,000;
- the surplus is invested in loans for a 2 to 5 year period paid back monthly.
4.3 Regional loan funds

Some regions create special loan funds in order to solve specific problems such as the transfer of ownership of enterprises or to soften the consequences of the failure of a major contractor.

Such investments have been put in place by Advantage West Midlands (UK), for instance in 2005 to avoid a “domino effect” bankruptcy among suppliers of the MG Rover Car company. That RDA has put in place a special loan fund named Advantage Transition Bridge Fund. The fund provided loans from €75,000 to 750,000 to enterprises affected by the closure of MG Rover. Supported enterprises had more than 15% of their turnover done with MG Rover. They had a viable business plan, but could not obtain funding from banks.

4.4 Spin-out loans funds

In the Netherlands, Twente University in Overijssel provides interest-free loans of up to €13,600 for teachers and students who want to start a business (more than 425 new businesses created since 1984). In addition to loans, the scheme also provides access to expert advice and university laboratories. A similar system is also taking place in Maastricht in cooperation with LIOF.

In the West Midlands (UK), the Mercia Spinner tool provides grants up to €75,000 towards patenting, market research, business plans, prototyping and interim management for university spin outs. This instrument is managed by a private investment company: Worwich Ventures.

In Andalusia (E), through the Campus project co-financed by ERDF and managed by AIDA (Agencia de Innovacion y Desarrollo de Andulciia), universities are able to provide up to €100,000 of free interest loans without guarantees and not refundable in case of total losses for technology based enterprises created by researchers. As part of a partnership, the agency gives a grant of €5,000 per project to the university that has promoted the project in order to ensure a follow up of the project and coaching system of the entrepreneur.

The support can take the form of a participative loan or can be converted into equity finance. There should be an exit after 7 years. The entrepreneurial project must be self-funded in at least 30%. 11 projects have been funded after 18 months (mid-2005).

4.5 Loans for innovative companies

OSEO (F) provides specific loans for enterprises facing problems to finance intangible investments such as: training, marketing and negotiation of a first order, internationalisation costs, commercialisation of an innovation, etc.

The scheme known as “contrat de développement innovation“ allows an enterprise to get a loan ranging from €40,000 to 400,000 for a period up to 6 years. The loan is provided with one year payback holiday and doesn’t need to be guaranteed. The interest rate of such loans comprises a fix part of 1.6% and a complementary remuneration based on the Euribor at 3 months. In all cases, a private bank must match at least 20% of the total loan needed by the enterprise.

4.6 Micro-loans

Micro-loans are aimed at small businesses that are unable to raise sufficient (or any) finance from traditional commercial sources. Such loans are available for commercial enterprises as well as for enterprises operating in the so-called social economy sector.

In the UK the South Investment Fund is offering loans of €1,600 to €20,000 for existing businesses and up to €16,000 for start ups.

A number of semi-public organisations have specialised in micro-credit provision. This is namely the case of ALMI (S) and FINNVERA (FIN). ALMI offers loans of up to €27,000. The EIF (European Investment Fund) set up a financial scheme to guarantee the micro-credit portfolios of non-banking operators involved in the segment of micro-credit focusing on support for the
development of social reintegration companies. The amount of this type of micro-credit is generally in the area of €3,000.

In order to minimise the entrepreneurial risk – notably in the development of very small businesses – some organisations develop micro-insurance schemes.

4.7 Loans for industrial reconversion

Some big enterprises, when facing industrial re-conversion, provide sometimes loans in order to create jobs in the region. For instance, Michelin Group (F) has created an ad hoc organisation named Micheli Development to offer loans at reduced rates. The amount of the loan is between €3,000 and €8,000 per job created, according to the type of activity (industry or services to industry), the quality of the project and the invested amount. However, the maximum amount of the loan cannot exceed €175,000.

In 2005, Michelin Development has provided €7 million of loans. Those loans are without guarantee and have a five-year-life time and they contribute to the running costs of SMEs.
CHAPTER 5 VENTURE CAPITAL

5.1 Business Angels

Business angels are individuals — generally experienced entrepreneurs — who invest their money, skills and time in newly created businesses in exchange for a share of their capital. Typical business angel tickets range between €25,000 and €250,000\(^{30}\). Many famous companies, including Ford, AT&T, Apple, Amazom.com, Body Shop, etc., managed their initial growth thanks to the contribution of one or more business angels.

More recently, business angel networks have emerged at regional level to recruit angels and match them with local entrepreneurs looking for finance and advice.

Business angels often develop their own path to make a deal. We can recognize three phases in such process:

- The identification phase. In this phase the business angel gets in contact with the entrepreneur. The angel can find the investment opportunity by himself or through an active engagement in a BAN (Business Angel Network).
- The due diligence phase. The angel screens in detail the business plan and the management team.
- The negotiation phase. The angel and the entrepreneur structure the deal and negotiate the value of the stake as well as the role of the BA or the exit process.

The role of a BAN in the deal flow is illustrated in the following graph:

Graph 11 The role of Business Angel Networks (BANs)

Source: EURADA-EBAN

\(^{30}\) In some cases, investment may reach as much as €500,000
The number of Business Angel Networks (BANs) in Europe has grown measurably since 1999. The European Commission\textsuperscript{31} and EBAN (European Association of Business Angel Networks) have played an important role in disseminating this concept. In the USA, more than 170 such networks have been identified. The total number in Europe is closer to 200, though some BANs have yet to close their first deal. Because of the informal nature of this sector, it is extremely difficult to collect statistical data. In the USA, more than 3 million angels invest roughly $50 billion annually, i.e. twice as much as it is estimated that European venture capitalists invest each year.

In 2007 EBAN members reported the following data regarding the importance of the industry:

- number of active angels in the networks: 15,578;
- number of deals: 1,130;
- amount invested: €184,202 i.e. an average value per deal of €163,000.

Most of the deals were made in France, UK, Belgium and Spain.

The informal venture capital market remains strongly conditioned by:

- taxes on private investment and capital gains or losses;
- regulations on public capital issues.

Because of the very nature of their activities, business angel networks often find it difficult to become sustainable. A number of regions support a sizeable share of these networks’ operating expenses.

As they mature, the range of services provided by business angel networks becomes increasingly sophisticated, including:

- angel syndication;
- setting up of dedicated funds that invest alongside angels;
- provision of easier exit routes for angels;
- business angel academies;
- investment readiness programmes;
- integrated finance;
- co-investment funds.

Entrepreneurs need to realise that angels will own a stake of their company. In some countries, this condition constitutes a major obstacle to the development of the informal venture capital market segment.

For entrepreneurs, the advantages of this funding source include:

- investment below the usual minimum amount invested by formal venture capitalists;
- investment in newly-created businesses without necessarily requiring evidence of a positive track-record;
- investment decisions tend to be made on a rather subjective basis—e.g. personal chemistry between angel and entrepreneur—compared to formal venture capitalists;
- angels are geographically closer to entrepreneurs who thereby also benefit from the latter’s personal networks. This proximity often leverages other funding sources.

Business Angel Networks act as a market place and provide valuable services both to entrepreneurs and investors. Among them it is worth mentioning:

- the project detection process. Projects reach the network by: words to mouth, peers, intermediary organisations, advertising campaigns, business angel academy events, etc.
- the identification of potential angels and the support to help them to start their business angels’ activities.

• the matching process. This process can be sometimes complex: first assessment of the business idea or business plan, training of the entrepreneur, improvement of the business plan, strengthening the skills of the team, training in deal agreements (dilution of power, exit route, ).

Since 2004 several business angel networks have been trying to set up co-investment funds (some people call this instrument “side-car funds”), which invest “pari passu” with angels. Such funds are already in place in England, Scotland and Belgium. In 2008, the European Investment Fund (EIF) should be able to invest in such funds and therefore to increased their means of action.32

In 2007 several entrepreneurs from the Nord-Pas-de-Calais Region (F) decided to create a new financial instrument named Re-Sources in order to provide between €100,000 and €800,000 to be invested in local enterprises. The Re-Sources instrument is a mixture of co-investment funds and business angel activities. Their objective is to help up to 6 enterprises per year.

5.2 Venture capital

The venture capital market includes different market segments and venture capital provision streams for businesses with a strong potential for growth. These techniques therefore mainly address businesses already operating for a few years.

According to EVCA (European Private Equity and Venture Capital Association), the European venture capital market comprises:

Table 6 Definition of the venture capital market segments

<table>
<thead>
<tr>
<th>Seed</th>
<th>Seed capital: capital investment serves to allow businesses to proceed with their RTD effort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>Start-up funds: investment capital serves product development and early marketing.</td>
</tr>
<tr>
<td>Expansion</td>
<td>Growth, bridging or restructuring capital.</td>
</tr>
<tr>
<td>Replacement</td>
<td>An investor buys another’s stake.</td>
</tr>
<tr>
<td>Buy-outs</td>
<td>Existing investors’ shares in a business are bought by the latter’s own management team (MBO—Management Buy Out) or by another management team supported by a venture capital fund.</td>
</tr>
</tbody>
</table>

Source: EVCA

In 2006, the European venture capital market totalled €71 billion invested in 7,536 companies compared to €37 billion invested in 6,985 companies in 2004. This market segment breaks down as follows in terms of average size investment in 2003 and 2006:

32  http://www.eif.org
Table 7 Importance of and developments in the various segments of the venture capital market

<table>
<thead>
<tr>
<th>Importance (%)</th>
<th>Average size / deal (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>Seed</td>
<td>1.6</td>
</tr>
<tr>
<td>Replacement capital</td>
<td>4.6</td>
</tr>
<tr>
<td>Start up</td>
<td>11.9</td>
</tr>
<tr>
<td>Expansion</td>
<td>29.4</td>
</tr>
<tr>
<td>Buy-outs</td>
<td>52.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: EVCA

In 2003, ¾ of the amount investment went to first-time investments and ¼ to follow-up financings.

According to EVCA\textsuperscript{33}, during the period 2002-2006 the private equity funds raised their sources of capital as follows:

- bank: 18%
- pension funds: 24%
- funds of funds: 15.5%
- insurance companies: 11%
- corporate investors: 5%
- government agencies: 9%
- private individuals: 7%
- academic institutions: 2.5%
- capital markets: 1%
- not available: 7%.

Before launching a quest for the “Holy Grail”, entrepreneurs and public decision-makers need to consider that:

“Only a small fraction of venture capital firms are interested in providing seed and start-up capital. Fund managers are receptive to the following parameters: proven innovative ideas, market shares, intellectual property and expanding established businesses. Besides, due diligence costs being equal regardless of deal size, venture capital fund managers generally believe that their resources are better spent on sizeable projects. Deal risk and size are both important factors in explaining venture capitalists’ increasingly evident lack of interest in seed and start-up investment\textsuperscript{34}.

5.3 Seed capital funds

This segment of the venture capital industry focuses on the provision of funding to businesses during the process of incorporation. Capital made available in this form is used to fund research and development and possibly field trials of prototypes, i.e. all activities that relate to pre-market stages of the product or service.

Total equity available in Europe for this purpose is somewhat limited (around €1,682 million in 2006). On average, seed capital funds currently invest around €3 million per deal. This ticket did not exceed €1 million between 2000 and 2005.

The activities of seed capital funds vary considerably across the European Union. In recent years, funds operating in France, Germany, Denmark, Italy, Finland, Norway and Spain have arguably ranked among the most active. In France, CDC (Caisse des Dépôts et Consignations), manages 15 funds, six of which are industry-specific while the rest are regional.

\textsuperscript{33} Les Echos, 30.03.2006

\textsuperscript{34} See: \textit{When Venture Capitalists say no}, Ron Peterson; Comanche Press M.D.
5.4 Mezzanine funding

Mezzanine funding is a hybrid product combining equity and loans. The product is used both by the private sector in LBO deals and by regional public funds.

According to a report from Crédit Suisse, the advantages and disadvantages of mezzanine funding for companies are the following:

Table 8  Advantages and disadvantages of mezzanine funding for companies

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedies financial shortfalls and provides capital backing</td>
<td>More expensive than conventional loan financing</td>
</tr>
<tr>
<td>Improves the balance sheet structure and thus credit-worthiness, which can</td>
<td>Capital provided for a limited term only, in contrast to pure equity capital</td>
</tr>
<tr>
<td>have a positive effect on the company’s rating and can widen the room</td>
<td>More stringent transparency requirements</td>
</tr>
<tr>
<td>for manoeuvre as regards financing</td>
<td></td>
</tr>
<tr>
<td>Strengthens economic equity capital without the need to dilute equity</td>
<td></td>
</tr>
<tr>
<td>holdings or surrender ownership rights</td>
<td></td>
</tr>
<tr>
<td>Tax-deductible interest payments and flexible remuneration structure</td>
<td></td>
</tr>
<tr>
<td>Greater entrepreneurial freedom for the company and limited right of</td>
<td></td>
</tr>
<tr>
<td>mezzanine investor to be consulted</td>
<td></td>
</tr>
</tbody>
</table>

Source: Crédit Suisse

The amounts invested through mezzanine funding vary according to the type of operator. In fact, public investments range from €100,000 to €2,500,000, while private investments range from €20,000,000 to €50,000,000.

5.5 University and research centre venture capital funds

In a number of EU Member States, universities have set up venture capital firms – generally along the same lines as seed capital funds – for the purpose of supporting business projects originating in the university itself or in research centres.

Among such funds are SECANT (Society for the Encouragement of New Technology Activities) set up by the University of Compiègne (F) as early as in 1997 with an initial capital of nearly €700,000 and ESINET (European Space Incubators Network) set up by the European Commission in 2002 to facilitate the development of civil applications from aerospace research outcomes. This fund invests between €50,000 and €300,000 per deal.

Since June 2003, London's Brunel University (UK) has £1 million available to support the seeding of businesses set up within its walls. Maximum investment per business project is £50,000. The University had plans to assist in the creation of 8 new businesses each year for the next five years. The fund is supported by the London Development Agency (LDA) and HSBC, as well as by JRA Technology.

In Wales (UK), Finance Wales manages a programme entitled “Spinout programme” offering a package for people who have a close ongoing relationship with a Higher Education Institution (HEI) wishing to set up a business. These people are graduates, academics and researchers and spin-ins, i.e. entrepreneurs having ideas needing a close relationship with HEI.

35  Crédit Suisse Economic Research, Economic briefing n°42
The Wales Spinout programme offers a package which may include:

- a 25,000 £ unsecured free interest loans not repayable during the first 3 months;
- a 7,500 £ grant to access business consultants and/or market research experts;
- free space in a HEI incubator;
- use of HEI expertise;
- equipment;
- on-going assistance.

In the UK, there is systematic support for the marketing of university research outcomes through the so-called University Challenge Funds available in 31 universities and 7 research centres.

In Belgium 6 universities have their own venture capital fund specialised in the early or seed capital market segment.

In 1999, the French Ministry for Research, Directorate for Technology, has issued a call for proposals aiming at co-financing technology incubators as well as seed capital funds. 12 funds were awarded State funding. 6 of them have sectorial objectives and the other 6 have regional based funds. 106 deals have been made between 1999 and 2005. It is worth noting that more than 80% of the deals have been made before 2002. Indeed, fund managers experiment difficulties to exit (9 voluntary exits only) and are often obliged to finance subsequent rounds, even if it was not their initial objective.

5.6 Corporate Venturing

This is a particular form of venture capital addressing businesses at the seed or start-up stage of their development. Indeed, in this market segment, capital is supplied by large businesses to finance both innovative spinouts and other companies set up in industries considered of strategic importance. A few major US companies including Motorola, Intel, Microsoft, Cisco and Johnson & Johnson have been active in this particular market segment at one time or another in their corporate history. In the USA, the exclusive aim of corporate venturing is to generate capital gains.

It should be noted that the most important corporate venture funds are related to pharmaceutical enterprises. Indeed, enterprises such as Eli Lilly, GlaxoSmithKline, Novartis, Novo Nordisk A/S or Sanofi-Aventis, manage funds having more than €100 million at their disposal.

In Europe, companies such as Belgacom (B), Thompson (F), Siemens (D) and Innovacom (a subsidiary of France Telecom) are also very active on this market segment. In 2004, Siemens for instance had 19 enterprises in its portfolio. Siemens activity in this field is entitled SMAC (Siemens Mobile Acceleration). The total investment made by SMAC, created in 2001, is worth more than €20 million.

Since 2002, the UK’s DTI (Department of Trade and Industry) has funded a programme to promote “a formal direct relationship usually between a larger and an independent smaller company in which both contribute to financial management or technical resources sharing risks and rewards equally for mutual growth” through an association called Corporate Venturing UK.

Sometimes European based companies develop corporate venture in the USA. This is the case of Siemens, which provides seed-stage funds and commercial helps to Berkeley (California) through its programme TTB (technology to business). This programme provides companies – 8 at mid October 2005 – with seed stage financing of about €415.000 and helps commercialisation. In return Siemens gets a percentage of each company and access new technologies.

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36 Les Echos, 25/5/2006
37 The Wall Street Journal, 14-16 October 2005
5.7 Public venture capital funds

There are market failures in many regions relating to the provision of venture capital for local SMEs. This particular form of market failure has been recognised by European Community institutions.

Indeed, in 2001, DG Competition of the European Commission published guidelines in this field defining the notion of market failure. The Commission limits the term "market failure" for cases where it is believed that a serious misallocation of resources has occurred. There are two main sources of market failure relevant to risk capital markets which particularly affect access to capital by SMEs and companies at the early stages of their development:

- imperfect or asymmetric information;
- transaction costs.

This administration allows public authorities to act on the venture capital market provided that:

- the existence of a market failure is clearly established;
- venture capital intervention is limited to €500,000-750,000 depending on the region concerned.

In the European Union, the main regional funds are active in the UK, and in particular in England, where the 9 regional development agencies (RDAs) set up since 2000 have now taken over management of these development instruments. Also worth noting is that the EIF (European Investment Fund) and the ERDF (European Regional Development Fund) contribute to these regional public venture capital funds.

A number of funds such as Merseyside Regional Fund (UK), have developed several specialised schemes including:

- **Micro-credit**: Individual loan amounts = £3,000-75,000;
- **Mezzanine**: Individual investment amounts = £75,000-250,000;
- **Venture Capital**: Individual investment amounts = £100,000-500,000;

Those three instruments are grouped under the acronym MSIF (Merseyside Special Investment Fund).

The UK is not the only country having promoted the emergence of public venture capital funds. It is also worth mentioning that in the Pôle Européen de Développement (European Development Pole covering the Belgian province of Luxembourg, the Grand Duchy of Luxembourg and the French region of Lorraine), EUREFI (Fonds Transfrontalier de Développement, Cross-border Development Fund) is very active and unique in that it pools the public resources of three regions situated in three different Member States.

In France, UNICER (Union Nationale des Investisseurs en Capital pour les Entreprises Régionales, National Union of Capital Investors for Regional Businesses) unites some 30 regional funds. Investment amounts range between €50,000 and €500,000.

Some regional funds can have a strong sectorial focus and take the advantages of a good public-private partnership. In mid 2005, the French regions Aquitaine and Midi-Pyrénées have both invested €1 million in an equity fund named Aerofund aiming at supporting SMEs acting in the aerospace sector. The fund is managed by ACE Management and has already collected money from enterprises such as EADS or SNECMA.

Advantage West Midlands has created in July 2003 a fund to support the creative industry.

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38 O.J. C 235, 21.8.2001 – State Aid and Risk Capital – Basis for authorising risk capital measures under Article 87(3)(a), (c) and (d) of the Treaty, VI.3
40 Les Echos, 22 June 2005
In France Fedarene (a public body promoting a friendly use of energy and environment protection) has set up in 2003 an investment fund named FIDEME specialised in wind energy with several private investors. The fund has €45 million under management. This fund has taken a stake in the DEMETER fund active in the expansion phase of the venture capital market. DEMETER has €120 million in portfolio and invests in eco-industry41.

5.8 Regional public equity investment firms

These firms had their moment of glory in the sixties. Some of them are still active while others are looking for alternative development channels, and others have disappeared because they failed to innovate or invested too heavily in companies whose death was predictable or inevitable.

They were known under a variety of acronyms in different countries: SDR (Regional Development Firms, in F and B), SODIS (E) and FIN (I).

Some of them have joined forces to set up an EEIG (European Economic Interest Grouping) called “Eurodevelopment”. Together, its 36 members weigh more than €600 million in financial assets invested in a portfolio of more than 3,000 client businesses.

The same category can be deemed to include regional development agencies operating in the Netherlands, such as LIOF (Province of Limburg).

In Belgium, such operators exist in every region:
- GIMV in Flanders. Remarkably, this firm is listed;
- SRIB (Brussels-Capital Regional Development Firm) in the Region of Brussels-Capital;
- SOWALFIN (Walloon Small and Medium-Sized Company Funding and Guarantee Firm) pools all financial instruments available to businesses operating in Wallonia.

In France, Regional Development Firms are operating in 13 metropolitan regions.

A number of French regional organisations have set up venture enterprise investment funds (VEIFs)42. This is how in December 2003, Toulouse-based IRDI (Regional Industrial Development Institute) of Midi-Pyrénées (F) launched a VEIF called ICSO1 (Venture Capital Investor in the South West) with €43 million in funding for company transfer and growth capital operations. The fund is fed by public partners (including the European Investment Fund, Caisse des Dépôts et Consignations, and the Regional Council), insurance companies, banks and private firms (Electricité de France and Total).

5.9 Industrial reconversion funds

A number of industrial groups facing structural adjustment issues leading either to the closure of production sites or to mass dismissal have set up finance companies that provide venture capital or loans to SMEs against a commitment to create new jobs or hire some of the workforce laid off at or near production sites affected by restructuring. Worth mentioning in this field are the initiatives of Charbonnages de France (French Public Coal Company) who set up SOFIREM) and FINORPA to operate in regional coal basins.

In Belgium, regional public authorities have set up a network of “invests”, i.e. specialised financial corporations acting at sub-regional level to acquire stakes in new businesses. In 2003, they joined forces under an umbrella agency called SOWALFIN controlled by the Walloon region.

41 Les Echos, 30 March 2006
42 Les Echos, 2-3 January 2004
5.10 Proximity funding

The social economy too, developed alternative ways to provide operators of this sector of economic and social life with an access to funding. While the tools are often similar to those of the capitalistic economy, individual deals are often smaller. Worth mentioning among these tools are:

- in France: Lovemoney operates using a business model that is similar to business angels;
- at European level, INAISE (International Association of Investors in the Social economy) is a grouping of several operators.

Proximity funding may also focus on regional commercial businesses. In December 2003, financial operators of the French North Department (Crédit Mutuel du Nord Europe and SIGEFI Nord Gestion) jointly launched a proximity investment fund called FIP Nord Europe PME to finance unlisted regional SMEs. Maximum stakes in individual companies reach €3,000.

5.11 Transmission funds

Zernike group (NL), in partnership with the ING Bank, has set up a first transmission venture capital fund in the Netherlands. The fund investment strategy is to take over medium size enterprises facing transmission problems in view of bringing new management team and clustering them around their products and services.

Zernike is planning to create a similar fund in Germany. The size of the Dutch fund is €200 million.

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43 Les Echos, 15 December 2003
CHAPTER 6  THE STOCK EXCHANGE

6.1 National Markets for SMEs

For businesses, listing on a stock exchange is the ultimate stage of venture capital finance. Since the success of NASDAQ, launched in the US in 1971\(^44\), several European exchanges have shown an interest in EGCs (Entrepreneurial Growth Companies). The most dynamic such markets today include the AIM (London Stock Exchange) and Alternext (Euronext-NYSE), respectively with 1,679 and 135 listed companies as of 1 June 2008. Worth noting is that in 2007, some 284 companies launched IPOs on the AIM, raising more than £11 billion (€16 billion) in equity v. 46 newly-listed companies on Alternext for a volume of €451 millions in raised capital. Less renowned exchange cities too, have developed specific market segments for SMEs. Worth mentioning in this respect is the IEX (Irish Enterprise Exchange) in Dublin (IRL) inaugurated in 2005 and which had attracted some twenty companies by 1 June 2008. Not all European initiatives to develop specific SME stock exchanges have been equally successful. Indeed, EASDAQ and Neue Markt (Frankfurt Stock Exchange, D) both failed to survive the burst internet bubble in the early 2000s.

Worth noting is that the conditions businesses need to meet for listing both on the AIM and Alternext are less demanding compared to the traditional stock exchange markets reserved for large companies.

Indeed, companies listed on the London AIM do not need to disclose their financial history, nor is there a minimum share issue requirement. Companies quoted on Alternext have to disclose their financial history for the last two years, issue at least €2.5 million in shares and undertake to make regular financial data disclosures.

Worth adding is that Alternext currently lists companies whose shareholders include at least 5 venture capital firms. And also worth recalling is that the AIM was set up in 1995 and had listed more than 2,900 businesses\(^45\) by mid-2008. As for Alternext, it was launched in mid-2005.

The breakdown by sectors of the 1425 listed enterprises on AIM stock exchange showed in 2005 the following rough picture\(^46\):

- Finance: 200  
- Informatics: 130  
- Services: 125  
- Media: 110  
- Gas and petrol 75

- Travel & leisure: 70  
- Real estate: 50  
- Bio & pharmaceutics: 50  
- Retail & distribution: 30

Presented below is the regional breakdown of UK businesses listed on the AIM as of 1 May 2008:


<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Anglia</td>
<td>98</td>
</tr>
<tr>
<td>London</td>
<td>579</td>
</tr>
<tr>
<td>Midlands</td>
<td>58</td>
</tr>
<tr>
<td>North West</td>
<td>113</td>
</tr>
<tr>
<td>Scotland</td>
<td>41</td>
</tr>
<tr>
<td>South East</td>
<td>117</td>
</tr>
<tr>
<td>South West</td>
<td>54</td>
</tr>
<tr>
<td>Wales</td>
<td>17</td>
</tr>
<tr>
<td>Yorkshire North East</td>
<td>17</td>
</tr>
<tr>
<td>Ireland</td>
<td>2</td>
</tr>
</tbody>
</table>

In their study entitled "Alternext two years later"\(^47\), experts from Ernst & Young and Avenir Finance showed that the age of enterprises listed on Alternext is broken down as follows

- less than 5 years: 4%
- between 5 and 10 years: 43%
- between 10 and 20 years: 39%
- more than 20 years: 14%.

\(^{44}\) Over 3,000 listed companies.  
\(^{45}\) Of which at least 500 companies from more than 70 countries in addition to the UK.  
\(^{46}\) Les Echos, 22 March 2006  
\(^{47}\) 80 listed companies to date (study of 11 May 2007).
Below is an indication of their turnover figures in 2005:

<table>
<thead>
<tr>
<th>Turnover Range</th>
<th>Percentage</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; €10 million</td>
<td>47%</td>
<td>36 companies</td>
</tr>
<tr>
<td>€10-30 million</td>
<td>33%</td>
<td>25 companies</td>
</tr>
<tr>
<td>€30-40 million</td>
<td>9%</td>
<td>75 companies</td>
</tr>
<tr>
<td>€40-100 million</td>
<td>7%</td>
<td>5 companies</td>
</tr>
<tr>
<td>&gt;100 million</td>
<td>4%</td>
<td>3 companies</td>
</tr>
</tbody>
</table>

These 80 companies were active in the followings sectors:

- Consumer services: 24
- Technology: 20
- Industry: 20
- Health: 6
- Consumer goods: 4
- Telecom: 3
- Oil & gas: 2
- Financial corporations: 2

6.2 Regional electronic SME stock exchange

Ofex, in UK, is an independent market focused on SMEs. Since its launch, Ofex has served over 500 enterprises.

Early 2008, Advantage West Midlands (UK) put in place a regional SME share exchange named "Investbx", aiming at helping SMEs to raise money through a web based in stock exchange. This new instrument will provide a better liquidity of the regional access to finance market.

Investbx was set up to address the difficulties facing SMEs in the Midlands when trying to raise £0.5-2 million. Indeed as of mid-2005, only 57 out of 300,000 businesses in the West Midlands were listed on the AIM and 10 on Ofex. Investbx expects to be able to meet the financial needs of at least 47 SMEs over the first five years of its existence.

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48 J.O. L 45, 20.2.08
CHAPTER 7    FROM BUSINESS ANGELS TO IPOs

The two tables below emphasise the difference – in terms of IPO and new jobs – between US and EU success stories in the NICT (New Information and Communication Technology) industry.

Table 9    Large American NTCI start-ups

<table>
<thead>
<tr>
<th>Company</th>
<th>Creation</th>
<th>IPO</th>
<th>Capitalisation</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>1975</td>
<td>1986</td>
<td>$290B</td>
<td>71 000</td>
</tr>
<tr>
<td>Cisco</td>
<td>1984</td>
<td>1990</td>
<td>$172B</td>
<td>49 900</td>
</tr>
<tr>
<td>Google</td>
<td>1998</td>
<td>2004</td>
<td>$149B</td>
<td>5 600</td>
</tr>
<tr>
<td>Intel</td>
<td>1968</td>
<td>1971</td>
<td>$121B</td>
<td>99 900</td>
</tr>
<tr>
<td>Oracle</td>
<td>1977</td>
<td>1986</td>
<td>$91B</td>
<td>68 400</td>
</tr>
<tr>
<td>Apple</td>
<td>1976</td>
<td>1984</td>
<td>$73B</td>
<td>17 800</td>
</tr>
<tr>
<td>Dell</td>
<td>1984</td>
<td>1988</td>
<td>$58B</td>
<td>78 700</td>
</tr>
<tr>
<td>eBay</td>
<td>1995</td>
<td>1998</td>
<td>$42B</td>
<td>12 300</td>
</tr>
<tr>
<td>Yahoo</td>
<td>1994</td>
<td>1996</td>
<td>$37B</td>
<td>9 800</td>
</tr>
<tr>
<td>Sun Microsystems</td>
<td>1982</td>
<td>1986</td>
<td>$19B</td>
<td>38 000</td>
</tr>
<tr>
<td>Amazon</td>
<td>1994</td>
<td>1997</td>
<td>$15B</td>
<td>13 300</td>
</tr>
<tr>
<td>Average</td>
<td>1984</td>
<td>1989</td>
<td>$97B</td>
<td>42 000</td>
</tr>
</tbody>
</table>

Source: Hervé Lebret, "Start-up. What we may still learn from Silicon Valley"

Table 10    Large European NTCI start-ups

<table>
<thead>
<tr>
<th>Company</th>
<th>Creation</th>
<th>IPO</th>
<th>Capitalisation</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP</td>
<td>1972</td>
<td>1988</td>
<td>$65B</td>
<td>37 700</td>
</tr>
<tr>
<td>Dassault Systèmes</td>
<td>1981</td>
<td>1996</td>
<td>$6.0B</td>
<td>5 700</td>
</tr>
<tr>
<td>Logitech</td>
<td>1981</td>
<td>1988</td>
<td>$5.1B</td>
<td>7 200</td>
</tr>
<tr>
<td>Business Objects</td>
<td>1990</td>
<td>1994</td>
<td>$3.7B</td>
<td>5 100</td>
</tr>
<tr>
<td>ARM Holding</td>
<td>1990</td>
<td>1998</td>
<td>$3.1B</td>
<td>1 500</td>
</tr>
<tr>
<td>Soitec</td>
<td>1992</td>
<td>1999</td>
<td>$2.6B</td>
<td>600</td>
</tr>
<tr>
<td>CSR</td>
<td>1998</td>
<td>2004</td>
<td>$1.5B</td>
<td>810</td>
</tr>
<tr>
<td>Autonomy</td>
<td>1996</td>
<td>1998</td>
<td>$1.5B</td>
<td>400</td>
</tr>
<tr>
<td>Gemplus</td>
<td>1988</td>
<td>2000</td>
<td>$1.2B</td>
<td>6 300</td>
</tr>
<tr>
<td>Average</td>
<td>1987</td>
<td>1996</td>
<td>$10B</td>
<td>7 200</td>
</tr>
</tbody>
</table>

Source: Hervé Lebret, "Start-up. What we may still learn from Silicon Valley"

The graphs below illustrate the venture capital funding cycles of two US companies that have become symbols of the success stories of the Silicon Valley, i.e. Amazon and Google.
Graph 12  A financial chronology of Amazon.com

A financial chronology of AMAZON.COM

Price/Share
$.001

1994
July 1994
November 1994

Founder
Jeff Bezos starts Amazon.com :He invests $10,000 and borrows $44,000

Family
Founder’s father and mother invest a combined $245,500

1995
February 1995
July 1995
August 1995
December 1995

Business Angels
Two angels invest a total of $54,408

1996
December ‘95 – May ‘96

Angel Syndicate
Twenty angels invest $46,850 each on average, for a total of $937,000

Family
Founder’s siblings invest $20,000

1997
May 1997

Venture Capitalists
Two venture capital funds invest $8 million

$.18

1998
December ‘97 – May ‘98

Initial Public Offering
Three million shares are offered on the equity market, raising $49.1 million

Loan and Bond Issue
$326 million bond issue is used to retire $75 million in loan debt and to finance operations

$.52.11
(exercise price on loan warrants)
$1,327.50 (in April 1999, adjusted for two stock splits)

Source :M.Van Osnabrugge and Robinson : data partially adapted from Smith and Kiholm (forthcoming)
A financial chronology of Google.com

Price/Share (in US $)

1995  Larry Page & Sergey Brin@Stanford University
1997  15 000 US $ credit cards
       100 000 US $ B.A. Andy Bechtolstein (Sun Microsystems)
       OTL Patent
0.06  end 1998
       960 000 US $ 3 B.A.
       OTL receives 2 % of the shares
0.50  May 1999
       25 000 000 US $ 2 V.C.
       Kleiner Perkins & Sequoia
2.34  2001
       15 000 000 US $ of which Yahoo
85.00  August 2004
       2 718 281 828 US $ I.P.O.
295.00  2005
       4 000 000 000 US $ Capital increase

NB: Turnover  200 000 US $  1999
              8 000 000 000 US $  2006

Source: Hervé Lebret
CHAPTER 8 OTHER FUNDING SOURCES

8.1 Repayable success-linked short-term loans
Such funding is provided by the French OSEO. It is targeted at innovative companies and entrepreneurs with a research and development project potentially leading to marketable products or processes. Loans may cover as much as 50% of eligible expenditure incurred as part of project stages including:

- formulation and feasibility;
- development;
- preparation of first production;
- taking out and extension of patents;
- market research;
- search for intermediary partners.

8.2 Stock purchase warrants
Since 2001, OSEO offers growing businesses a financial product called BSA (stock purchase warrants), i.e. securities carrying the right to purchase shares of the issuing body at a fixed price within a specific timeframe.

BSAs have a double advantage for issuing businesses:

- higher equity capital meaning a stronger financial basis;
- improved cash position.

OSEO receives BSAs in exchange for its financial support, either immediately or by instalments as the business project develops, or at the time of calling its claim in the case of a repayable short-term loan.

Worth highlighting is that business developers have pre-emptive rights to buy back OSEO’s BSAs if a third party offers to acquire them. As a rule, OSEO avoids keeping BSAs of individual businesses for more than ten years.

8.3 Factoring
Factoring is a fast and flexible way of alleviating businesses’ cash flow problems by both providing short-term liquid assets (24 to 48 hours) and protecting them against payments outstanding.

Companies may obtain up to 90% of the full amount of their invoices as soon as products are delivered or services are provided. Factoring applies to both domestic and export bills. Europe accounts for 65% of the global factoring market, estimated at a total of €670 million.

Factoring costs depend upon a number of elements. Indeed, the fees charged by factors are based on:

- the value of assigned claims;
- possible assorted services (administration, management, financing, credit insurance).

Commissions vary between 0.5% and 2% and interest rates are 2-3% above the basic rate charged by banks.

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49 In Belgium, advances on invoices generally amount to 75-85%
50 L’Echo, 29 October 2003
51 European SME Observatory, 2003 n°2. SME Access to Finance
8.4 Leasing

Leases are an instrument whereby a financial organisation (the lessor) awards a company (the lessee) the right to enjoy an asset for a predetermined period of time against regular “rents”.

The leasing market is subdivided into two segments: real estate (18%) and capital goods (82%). In the latter segment, the largest market share is represented by cars (33%), followed by industrial machinery and equipment (25%), lorries (19%), computers and business machines (12%) and heavy transport equipment (ships, planes, rolling stock – 4%).

Leasing habits differ across EU Member States, with market penetration as a percentage of total business investment being stronger in France, Italy, Germany and the UK.

Over 1,300 companies are active in this industry in Europe.

8.5 Franchising

This concept can be a tool to finance the growth of an enterprise.

The development of a network often needs an important amount of capital both for the brand holder and for the franchised entrepreneurs. Recently this market has been looked at by venture capitalists. In France, Natexis Private Equity has created a specialised fund named SPES. Entreprises such as Intersport, Mr. Bricolage or Optic 2000 benefited from that fund.
CHAPTER 9  GUARANTEES

Guarantees are an important tool to improve businesses’ access to credit. According to AECM (European Association of Mutual Guarantee Societies), there are different types of guarantee schemes:

- mutual or joint-guarantee societies;
- public guarantee schemes, often set up by national or regional public authorities;
- guarantee or counter-guarantee schemes.

While banks are to be the principal source of external capital for small and medium-sized enterprises, guarantee schemes have a complementary role to play by making available guarantees to compensate for SMEs’ insufficient collateral. The aim of guarantee societies is to improve the access to professional credit for viable small and medium-sized business projects without the personal collateral required by banks in the hope of building a stable long-term relationship.

Guarantee schemes are formed by a mixture of private and/or public initiatives and usually involve entrepreneurs either directly or indirectly in the action, decision-making and management mechanisms. A special characteristic of the European structure is the existence of national counter guarantees, regional in some cases, and supranational counter guarantee platform organized and financed by the European Commission and handled by the European Investment Fund.

In Finland, public corporation FINNVERA provides both loans and guarantees to SMEs which do not have access to bank loans because they lack adequate guarantees. FINNVERA’s activities are deployed under six specific schemes:

- investment finance: mid and long-term loans and guarantees for newly-created SMEs;
- working capital supply: short to mid-term loans and guarantees;
- growth capital: low-rate loans and mid-term guarantees for business growth or environmental protection;
- micro-credit: low-rate, short to long-term loans and guarantees for micro-businesses;
- export credit guarantees;
- internationalisation funds.

The traditional approach is to present the guarantee as a “generic product”, guarantee can also be presented in various packages. According to experts of European Commission who launched the project “Expert Group on BEST Practice in the field of Guarantees”, guarantee products can be grouped as following:

- **Business start-ups guarantees**
  
  The German Bürgschaftsbanken launched the “Bürgschaft ohne Bank” system. The entrepreneur contacts the Guarantee Society; its credit file is completed and analyzed with the assistance of experts of the Chamber of Craft/Commerce/Industry. A guarantee bond is provided to successful applications. The bank intervenes at a stage when the file is already completed and the partly coverage ensured. Some guarantee banks add an accompanying service, which enables a follow-up of the starting businesses.

- **Micro-credits guarantees**
  
  FINNVERA (FIN). A micro-credit guarantee is intended for enterprises being established or employing a maximum of 50 persons. A micro-credit guarantee helps SMEs to obtain a loan and facilitates loan and guarantee decisions. A micro-enterprise guarantee is based on a credit and guarantee facility agreement, concluded between FINNVERA and banks, to enable small credits, generally of maximum €25,000, to be guaranteed by dividing the risk with a bank.

- **Guarantee for growing companies**
Vaekstkaution (DK) gives support to companies with a high growth potential: the guarantee applies to the development of new products, concepts, production methods or markets. The decision-making process is of less than 5 days for loans from €10,000 to €670,000. The guarantee premium amounts to 3% for the years 1 and 2, than to 1.5% for the next years.

- **Guarantee for business internationalization**
  AWS (A) proposes a guarantee to the Austrian companies, which pursue an objective of internationalization. The premium rate is limited (0.5%/year) and the protection is high (80%).
  FINVERA’s (FIN) internationalization guarantee is intended to serve as collateral for financing the business operations of a Finnish SME abroad. The guarantee may be used when a subsidiary or an affiliated company abroad needs funding for investment, development or growth. The guarantee can also be used to acquire or increase a holding, or to raise the share capital, in a subsidiary or in an affiliated company abroad.

- **Innovation guarantees**
  AWS (A) runs a guarantee programme Innovative Dynamic SMEs to encourage productive investments and high technologies. A guarantee of 80% is attached to loans of a maximum of 1 million Euros. The premium ranges between 0.5% and 1.5% according to the risk. A profit sharing premium can be applied.
  Sofaris (F) manages the “Biotechnology” fund, which is a combination of loan and venture capital guarantee. Sofaris has established contractual partnership with 16 Venture Capital companies and provides them with a 50% guarantee for 10 years.

- **Guarantee for working capital needs**
  Hitelgarancia (H) developed a guarantee linked with a credit card. In full security, cash can be drawn and suppliers can be paid from a guaranteed account.
  RCGF (LT) proposes a guarantee to short-time credits (up to 2 years), which are used by businesses to supplement current assets. The one-off guarantee fee is usually smaller than premium for long-term investment guarantees and accounts to 2% of the guaranteed credit amount.

- **Business transfer guarantees**
  Siagi (F) is a guarantee society specialized in transfer and succession of micro-businesses. Bankers are interested in the professional expertise of Siagi and are satisfied with a guarantee protection negociated at 35 to 45% of the final loss.
CHAPTER 10 WHAT COULD THE PUBLIC SECTOR DO?

10.1 Scope of the public interventions

The scope for public interventions lays both at the supply side (provision of finance) and at the demand side (increase the quality of the business plan or reduce the risk to be taken by investors). The public sector can try to solve market failures by helping the demand to match the offer through networking activities.

We have evidences that at least thirteen different types of market failures occur in the field of access to finance by SMEs and start-ups. Those market failures can be:

- information failures: due to the fact that “not all the money is the same” and that the market might be fragmented;
- insufficient infrastructures: due to the fact that some tools do not exist, for instance business angel networks, investment readiness schemes, seed capital funds...
- inefficient functioning of markets: due to the lack of competition, no exit opportunities for early stage investors, permanent assisted mentality of entrepreneurs used to receiving grants instead of fighting for equity, ...
- limited interaction between actors due to a lack of an integrated approach, the existence of a value chain or a lack of governance;
- institutional mismatch between the infrastructure and the market needs due to lack of understanding by the public sector of the real needs of enterprises and the market failures;
- missing demanding customers due to cultural problems as well as good perception of investors’ expectations;
- government failure: due to a lack of coordination and to a focus on a component of the value chain;
- equity gaps;
- insufficient number of private investors;
- lack of risk-taking;
- bad framework conditions (legal, administrative, fiscal, environmental);
- bureaucracy practices;
- lack of public-private partnership.

10.2 Improving the demand side

Public policy should invest in schemes allowing entrepreneurs to become investment ready; this can take different forms, such as:

- support to enterprises wishing to improve their business plan in order to access financial tools;
- business plan competition;
- financial intermediation;
- investment readiness schemes;
- support the cost of “hands on” management systems and the due diligence costs;
- reviewing blockages in distribution channels to specific entrepreneurs: disadvantaged groups or communities;
- support the costs of public rating systems both on the point of view of bank or technology risk in favour of SMEs.

10.3 Improving the supply side

Public authorities can provide different supports in order to add value in the value chain of access to finance for SMEs. The support can take the form of:

- fiscal incentives aiming at improving the environment for business angels and individuals investing either in innovative enterprises or in non-quoted enterprises;
• soft measures such as reducing the costs of financial investors to do the due diligence or support for the recruitment of financial advisors by intermediary organisations;
• stake in funds. Public authorities can contribute to the creation or the sustainability of specific funds responding to regional market failure;
• clustering the main stakeholders in order to organise or strengthen a regional value chain;
• providing guarantees or grants to reduce the level of risk taken by investors.

10.4 Networking

Networking is a very useful tool to act as a facilitation process between entrepreneurs and investors. Investment readiness schemes can provide good opportunities for entrepreneurs to improve the quality of their demand. Business Angel Networks provide also advantages as matching platform between informal investors and entrepreneurs seeking start-up money.

Public authorities can also support regional networks aiming to secure expertise and equity for early stage companies.

In the Midlands (UK) a non profit network named Connect Midlands acts as facilitator between technology business and investors through a comprehensive programme of events helping young companies to become “investor-ready” and to meet potential investors. The events organised by Connect Midlands are:
• Invoked – an investment readiness programme;
• Connect Springboard – an investment raising platform for enterprises seeking up to €750,000;
• Connect Round Table – an investment raising platform for enterprises seeking between €375,000 and 1,500,000;
• Connect Investment Conferences – an investment raising platform for enterprises seeking from €375,000 to 4,250,000;
• Knowledge and Skill Building – events in the form of technology briefings, enterprise workshops and meetings with the entrepreneurs.

Connect Midlands has a wide range of sponsors such as regional development agencies, universities, business advisors companies, venture capital funds ...

It provides also several benefits to its membership.
INTRODUCTION

Public policy needs to adopt a new model, focusing on throughout analysis of the demand of the various regional enterprises, to effectively stimulate innovation, creativity, the development of knowledge and the marketing of innovating products and services.

In this field, the current benchmark is the Silicon Valley.

Worth recalling once and for all at this point is that there are four – equally important – ingredients* making the Silicon Valley what it is and that it will most likely remain a unique occurrence:

a) The presence at regional level of dynamic and active institutions producing research, new ideas and technological innovation translating into products and services. This dynamism is reflected not only in the production of ideas but also in the fluidity of exchange and cooperation among all local stakeholders.

b) A dense fabric of financial institutions allowing start-ups to secure adequate sources of finance regardless of the nature, sectoral rooting and development cycle of their project. The networking dimension is also represented and has played a sizeable role in the success of the Silicon Valley. Indeed, business angels, successful entrepreneurs and seed and venture capital fund managers invest in the coaching of business developers and the monitoring of their projects. In some cases, venture capitalists have intervened to change start-up management teams.

c) A structured social capital that can be marshalled in support of many initiatives such as the mentoring of start-ups by serial entrepreneurs, business angels and venture capitalists.

d) A culture of risk-taking instilled through the entrepreneurial challenge and supported by positive media and an educational system that is open to entrepreneurship.

Framework legislation and public strategies, even where they make added resources available for regional development, do not create jobs and growth – only businesses do. Pedro Arboleda of Monitor Group put this in a slightly different way when he said that "businesses, not regions, are competitive" and concluded that the "question for government is how to attract as many competitive firms as possible." We would add that we believe the academic model of a triple helix is obsolete in that it does not recognize the overriding importance of private venture-capital investment in the development of businesses which have to be global players simply to exist.

To draw up the list of business projects that can be developed in a region with the best chances of success, all public authorities must strive to fully understand the strengths and weaknesses of their region’s potential attractiveness and competitiveness as not all strategies can be applied in all regions.

It is vitally important for national and regional authorities to reshape their offering of service in support of business development to the new needs of businesses operating in the knowledge economy. The priorities are:

- access to capital
- development of support services enabling the commercialization of the technologies created and optimal use of the innovation potential of regional enterprises
- reduction of administrative expense for the protection of intellectual property
- reducing time to market, in particular by making public procurement more open to innovative businesses or developing new forms of private-public cooperation
- incentives for cooperation between business and universities for applied industrial research
- facilitating the recruitment and retention of talent from other countries, as well as the return of expatriates
- support for the development of global networks allowing for the different phases in the innovation.

Regional authorities can contribute to the emergence, preservation and reinforcement of the competitive advantages of businesses through initiatives targeting:

- clusters and other competitive groupings
- venture capital funds specialized in financing for creative industries
- centres specialized in the promotion of intellectual property rights
- design centres
- technical centres
- business real estate
- business intelligence
- support for the registration of patents, commercialization of innovative ideas (proof of concept) and identification of unutilized entrepreneurial ideas (spin-offs)
- vocational training.

These initiatives must support the creation of regional competences in the field of:

- research
- marketable invention and innovation
- design
- NICT content (New Information and Communication Technologies)
- intellectual property rights (patents, copyright, trademarks, proprietary processes)
- quality
- artistic production
- roll-out of new products and services
- the combination of complementary knowledge and technologies
- entrepreneurship
- venture capital funding of young enterprises
- management of local and international networks.

To contribute to the knowledge economy, the various forms of competency listed above must underpin the creation of added value and the competitive advantages of a business or region.

However, public authorities need to ensure that these initiatives do not overlap each other or stack up (“lasagne-style”). Indeed, schemes all too often add layer upon layer of piecemeal intervention rather than act as the links of a strategic chain and vision. Not to mention the fact that in some cases, intermediary organisations are even set up specifically for the purpose of delivering a new scheme.
Thus, delivering regional innovation strategies is a complex effort requiring the commitment of a wide variety of stakeholders with complementary competences. This may warrant support to clusters and competitiveness centres.

It is an effort that requires consideration of at least the eight parameters below:

1. business requirements;
2. local RTDI infrastructure;
3. public provision of high value-added support services;
4. availability of adequate amounts of venture capital;
5. networks of public and private stakeholders;
6. advisory services;
7. the presence of Entrepreneurial Growth Companies (EGCs or gazelles);
8. talented labour and manpower training.

The above parameters can be analysed in the form of a regional innovation supply chain (see 3.3 below), which is the best approach to spot the weaknesses of the regional innovation ecosystem.

A simplified representation of such a supply chain would include the following components:

```
Knowledge production process                   Commercialisation process
|                                           |
|                                          |
|                                           |
Idea → Research → Prototype design → Proof of concept → Production → Marketing Distribution

Innovation or knowledge leveraging process
```

The “ideas” and “research” stages are influenced by external factors. They are increasingly outsourced or even offshored. This type of information needs to be considered when developing SME support policies since SMEs can be innovative themselves or be associated to the innovation process through joint development or subcontracting.

Finally, regional strategies must be able to evolve and be evaluated. Therefore, a virtuous circle of constant improvement of the quality of their components must be mainstreamed into strategies right from their development. This can be done by considering the items below:

```
Evaluation and Benchmarking → Supply & demand analysis

Delivery → Strategic planning
```

With this practice of permanent assessment, it is possible to demonstrate that the regional public sector knows what it is talking about when it advocates the promotion of a regional culture of innovation.

Worth pointing out is that innovation can be synonymous with high or new technology, improvement of products or services and/or their production processes or even their business model (low costs, marketing, distribution, etc.). In terms of innovation relating to production
processes, worth listing are mainly automation, digitalisation, outsourcing and integration of two or more technologies. These innovation formats all strongly impact occupational skills requirements and therefore require strong synergies between innovation and employment strategies.

Finally, it may be useful for regional and local authorities to develop innovation readiness services for SMEs – using the same model as the investment readiness services provided to business developers to help them in the search for finance (see section 3.1 in part 2 above entitled “All Money Is Not the Same!”). Such a process needs to consider the following parameters:

- technological validation;
- checking intellectual property rights for possible IP exploitation or enhancement;
- quality of the technological argument and of intellectual property in the business plan;
- checking compliance with norms and other standards as well as existing legislation, including in environmental and ethical terms;
- confirming market size and the relevance of projected distribution channels;
- checking prototype quality and options for mass production of the product;
- validating the business model, including its sections on human resources, financial plan and return on investment.

These types of support services can be delivered through SME coaching and mentoring.

For a wide variety of reasons, the competitiveness of European countries and regions – as in other developed countries – needs to rest on the creativity of the men and companies established there.

In order to retrain or to create this kind of regional competitive advantage, public authorities and the private sector will self-evidently need, each in their own area of competence, to pay attention to competitiveness factors including:

- the quality of human resources, including their varied nature and mobility and the smoothness of movements between different sections of personnel;
- the attractiveness of both individual regions and their universities for talent and RTD- and innovation-related activities;
- the financing of creative industries and the protection of intellectual property rights;
- harnessing and leveraging businesses’ intangible assets, generally comprising their human, knowledge-based, process and customer capital and notably taking the form of patents, brand and design;
- the ability to mainstream new technology into traditional industries or to develop new uses for existing products in the absence of new market development opportunities;
- evolving competitiveness and product and service range renewal in creation-intensive sectors in which Europe has global industry leaders (luxury products, fashion, design, development tools, aerospace, etc.);
- leveraging creativity and talent as key regional marketing campaign arguments;
- the impact of NICT – and possibly web 2.0 – on the relocation/automation of creative functions such as design and technological innovation;
- developing new markets (alternative energy sources, wellness, eco-development, etc.) for which the ability to innovate will generate sizeable new market opportunities;
- implementing public and business support service policies that are suited to the needs and demands of companies conducting creative activities or rooting their future development in intangible capital;
- the role of universities in local development.
CHAPTER 1     THE REQUIREMENTS OF BUSINESSES

The ways in which businesses innovate have changed considerably in recent years, whether through open-source or joint development approaches. It is the duty of public authorities to adjust their financial and other support provision strategies to this new reality.

As a result of these changes, hierarchic “vertical” business operation models are increasingly discarded and replaced by “horizontal” cooperation-development-network systems that ignore both internal business boundaries and continental borders.

In order to best meet the new expectations of regional businesses, public authorities need to segment – and subsequently inventory – the latter according to both their innovation potential and the pressures generated by their markets. This approach then makes it easier to adjust support service provision to expressed or latent regional SME requirements or to team up with private operators in order to meet the real needs of SMEs.

Every region should normally be able to identify and meet the needs of the four categories of businesses below:

- newly-developed hi-tech companies (start-ups, spin-outs, etc.);
- entrepreneurial growth companies (EGCs or gazelles), which can be innovative without necessarily belonging to the “hi-tech” category of businesses;
- mid-sized enterprises with latent innovative potential;
- local businesses threatened by a lack of innovation potential.

Once businesses have been segmented, there is a need to determine, at the level of individual businesses or groups of them, the main possible obstacles to or drivers of the innovation potential. This segmentation considers the following parameters:

- the nature of innovation: product, service, process, business model, etc.;
- the ability to generate and manage innovative projects locally or through outsourcing, joint development or even mirroring of the competition;
- financial capacity through reinvestment of profits, own equity, subsidies, repayable short-term and other loans and use of different venture capital formats;
- management commitment to innovation: tradition, need to raise awareness of the innovation process, use of external auditing to identify untapped opportunities;
- business integration in the strategy or business model: existence of an economic intelligence and technological watch, in-service training and ad-hoc budgeting system, deployment of a system to reward ideas, existence of a research department in-house, take-up of joint research projects, etc.;
- the innovation trigger: in-house or external ideas, mirroring competition, invention, constant improvement of production quality or processes, contribution to solving client needs, etc.

The results of this analysis of demand should lead to the development or provision of business services including:

- specific advice on innovative project implementation and finance;
- networking;
- potential project identification;
- innovation process awareness;
- use of technological or economic intelligence systems.

To this end, some public authorities invest in:

- economic intelligence or watch units;
- individualised audit schemes;
- observatories of regional business innovation practice;
- sub-regional and extra-regional benchmarking of business innovation practices;
• issuing innovation vouchers to SMEs to promote their access to the resources of the research centres of large companies;
• the establishment of a dedicated department in regional development agencies. This approach is to be recommended in preference to the development of regional innovation agencies from scratch for at least two reasons – justified by commonsense and a concern for effectiveness –: entrepreneurship and innovation have become inseparable and there is a need to curtail the proliferation and fragmentation of public service provision. Besides, structural cost savings (on staff, real estate, operation, etc.) would make useful additions to the resources available to finance practical projects.

In the globalised knowledge-based economy, businesses operating in both the manufacturing and services industries are exposed to the constraints below – which must be taken into account when formulating regional strategies:

• the emergence of new business models based on a reformulation of the production and innovation supply chain;
• the emergence of new technologies or traditional products and services integrating or leveraging new technology;
• the relocation of geographical consumption, production, design, competence and – sometimes even – decisional centres;
• environmental and energy constraints;
• talent recruitment difficulties;
• client behaviour changes;
• shortened product and service lifecycles and time-to-market (market penetration window);
• higher RTDI and proof-of-concept costs.

Furthermore, public authorities will also need to reckon with or improve awareness of the fact that the added value created by businesses these days is the result of intangible assets rather than control of production – including staff – costs. This realisation is illustrated in the graph below.

Consequently, new types of support services have to be available in regions, including in cooperation with private providers of strategic business advice.
Public authorities will therefore have to develop support services for regional SMEs to help them adjust to the internal innovation practices of large companies. Worth underlining is that companies such as Procter & Gamble, Henkel and 3M have won recognition for their in-house structures for the promotion of innovation based on incentives for the creativity of staff and, in some cases, customers.

Henkel\textsuperscript{52}, which derives up to 30\% of sales from products launched less than three years ago, offered an innovation trophy to reward outside inventors in areas including design, applications, patents and product concepts, at the same time calling on staff to make their own contributions. In just a few months, 81,300 ideas were put forward, with 4,200 of these chosen for more detailed consideration. It takes from six months to three years to bring an idea to market.

A recent Eurostat poll\textsuperscript{53} showed that staff members were the main source of knowledge for 47.4\% of innovative European businesses, customers for 27.2\% and suppliers for 23.8\%. Universities were cited as the main source by only 3\% and public research organizations by only 2\%.

These findings are confirmed in the results of a survey of 765 CEOs conducted by IBM\textsuperscript{54}, which shows employees to be the main source of innovative ideas for 40\%, business partners for 35\%, customers for 35\%, consultants for 22\%, competitors for 20\%, professional associations, trade fairs and conferences for 17\%, in-house R&D for 7.5\% and universities for 6\%.

The above information is connected to the open innovation methods increasingly developed by large corporations. Open source development is a method whereby companies can procure knowledge and/or innovation from any external source through spontaneous or elicited proposals (crowdsourcing). Multinationals including Procter & Gamble, IBM, Philips, Telefonica, Kraft, etc. increasingly use this method. In this context, support services need to improve SME knowledge of open source techniques and help them redevelop their own innovation strategies in order both to leverage this innovation method and make their own innovation capacity available to large companies whilst also protecting their intellectual property rights where necessary.

In any case, this requires strengthening regional policy tools promoting:

- internationalisation;
- mobility;
- networking;
- global development and harnessing of knowledge.

Worth noting is that while Europe remains an attractive location for the research centres of international companies, the latter have already started segmenting their activities. Indeed, according to a study of the Centre d'Analyse Stratégique\textsuperscript{55}, the R&D centres of multinationals are ranked according to three types of specialisation:

\begin{itemize}
  \item “Product customisation” centres, whose purpose is to adjust products to the specific requirements of the different national markets on which the multinationals operate;
  \item “Global innovation” centres, which provide access to resources that are not necessarily available at national level;
  \item “Radicalisation” centres, which act as subcontractors to the parent company with a view to generating savings from the recruitment of low-cost, highly skilled labour.
\end{itemize}

The study underscores that the choice of a location for R&D activities is guided by the quality of infrastructure, education and training, fundamental research and public-private cooperation.

\textsuperscript{52} La Tribune, 28 June 2007
\textsuperscript{53} Statistics in focus — Science and Technology, vol. 81/2007
\textsuperscript{55} Internationalisation de la R&D des entreprises et attractivité de la France ("Internationalisation of Corporate R&D and the Attractiveness of France").
CHAPTER 2 THE RANGE OF SUPPORT SERVICES PROVIDED AS PART OF REGIONAL INNOVATION STRATEGIES

2.1 RTDI Infrastructure

In general, regions are all equipped with incubators, sectoral technical centres and technological parks.

So the focus of infrastructural investment should presently be on strengthening the interfaces between businesses and universities and research centres as centres of competence and between businesses and private investors.

In order to complement the existing RTDI infrastructure provision, some regions invest in:

- specialist intellectual property promotion and protection;
- regional design and quality centres;
- prototyping and quality testing facilities and equipment;
- business angels, investment readiness and innovative project maturation networks;
- interfaces to support the commercialisation of research project outcomes.

2.2 The range of high value-added support services

The innovation culture of businesses and regions relies essentially on intangible factors including technical, commercial or entrepreneurial creativeness and risk-taking.

Public support services therefore need tweaking to namely provide:

- subsidies to leverage intellectual property;
- schemes to give SMEs access to external competences (RTDI vouchers, subsidies to hire university graduates, etc.);
- proof-of-concept support (prototyping, design, quality, etc.);
- help to attract or provide venture capital and investment readiness schemes (see 2.3 below);
- a scheme to (pre)finance and commercialise RTDI projects;
- finance for collective applied RTDI projects;
- resources to integrate universities in the regional productive ecosystem and encourage commercial use of knowledge developed in universities, whether in-house (spin-offs) or externally (licensing, preferably of regional companies).

As for patents, public authorities need to understand that they no longer just protect products or technologies but have themselves become tradable goods. The feasibility of regional marketplaces for intellectual property trading should be examined. And in the face of increasing research costs and shortened product lifecycles – even in the case of extremely innovative products –, regional authorities will likewise develop – alongside traditional support – regional platforms enabling SMEs to combine knowledge developed in closely related sectors.

2.3 The Availability of Venture Capital

Numerous analyses underscore that the majority of EU businesses are undercapitalised and that regions lack adequate venture capital instruments. This realisation explains to a large extent the inability of EU SMEs to grow and maximise their innovation potential. This undercapitalisation is also a sizeable obstacle when it comes to securing bank loans. Thus, the solution is improved provision of SME access to either guarantee schemes or venture capital, whether private or – in case of market failure – public.

The five main venture capital formats need to be available at regional level to address the needs of businesses at the different stages of their lifecycle or innovation project development:

a) informal venture capital (business angels);

b) seed capital;
c) venture capital;
d) mezzanine funding;
e) repayable short-term loans, possibly convertible into venture capital.

The availability of guarantee funds as collateral for bank loans is an undeniable advantage.

Region need to realise that they have to either attract private investors to their territory or build public-private partnerships to deploy similar instruments to finance innovative businesses – for more details, see Part 2 above.

Worth underscoring is that some authors argue that only two innovative technologies out of 10,000 ever become global leaders. The supposed progression from idea to champion is the following:

Out of 10,000 technological development ideas:
1,000 will give birth to a company;
100 will be financed by venture capital funds;
10 will be listed on the stock exchange;
2 will become world leaders.

The same authors also estimate that out of 1.5 million new businesses developed in Europe every year, while roughly 150,000 can be said to have high growth potential, 3,000 to 4,000 only will gain access to venture capitalists to finance their growth.

2.4 The Quality of Public and Private Stakeholder Networks

The quality of regional networks is measured in terms of their governance, representativeness and added value. In principle, the latter is measured in transaction cost savings and access to technological and commercial information and competences (labour, talent, finance).

Since in the global knowledge-based economy, neither individuals nor businesses nor regions can shoot for multidisciplinary and multi-sectoral excellence on their own, local and cross-regional networking becomes crucial when it comes to stimulating innovation. Consequently, the saying “think global, act local” loses its meaning and should be replaced by “think local to be global”. Thus, the different formal and informal networking formats that exist on a regional scale need to acquire a transnational/global dimension.

To increase the range of services they provide in this field, regions need to promote:

- the emergence of incubators;
- the development of innovation vouchers, which should ideally be exchangeable in competence centres outside their region too – and even possibly in other countries;
- the implementation of an ambitious policy to attract and retain talent, including foreign students;
- their involvement in networks of key stakeholders in the evaluation of innovation requirements while rejecting their corporatist and clientelist tendencies if any;
- attraction in their region of companies specialised in knowledge brokerage (e.g. NineSigma, Innocentive, YourEncore, SPI-Sociedade Portuguesa de Inovação, etc.)

2.5 The Role of Universities in Stimulating Innovation

There is a need to become aware of the fact that universities play a crucial role in regional development through the multiplicity of their potential intervention in support of entrepreneurship and innovation. Below is as exhaustive as possible a list of potentially relevant forms of university intervention in support of the development of a regional innovation culture and practice.

→ education and training of students;
→ lifelong training of the general population;

56 Rudy Aernoudt: Presentation at the 4th INSME Annual Meeting in Gurangzhou, 3 July 08.
Entrepreneurship, via activities such as:
- Promoting entrepreneurship;
- Developing new businesses (spin offs);

Leveraging knowledge from:
- Marketing project outcomes;
- Technology transfers;
- Small business consulting;

Managing infrastructure including:
- Preincubators;
- Incubators;
- Science/Technology parks;
- Laboratories shared with regional players;

Economic coordination by means of active participation in structures such as:
- Clusters;
- University/SME interfaces;
- Seed capital funds;

Development of public-private partnerships
Talent attraction.

In addition to the interventions described above, which are of an endogenous nature, there is a need to consider the role of regional universities in terms of:
- Leveraging their reputation to attract and retain talent;
- Promoting internationalisation by transferring the regional know-how to operators in other regions and countries;
- Supporting areas that do not have a university, notably by conducting research activities on their behalf.

2.6 Private consulting market dynamics

Innovation calls upon a number of competences that the public sector cannot always provide, if only because it cannot match the wages paid by the private sector for these skills.

In general, sophisticated private services comprising the innovation value chain include:
- leveraging and commercialising patents and licenses;
- valuing businesses during negotiations with venture capitalists upon IPOs;
- contract development;
- acquisition/merger advice;
- marketing and branding advice;
- location, offshoring or outsourcing support;
- business model appraisal;
- human resource advice.

In this context, regions need to focus particular attention on the attitude of serial entrepreneurs, i.e. people with a personal fortune enabling them to act as business angels, of venture capital fund players and of university and research centre staff who could become or support business developers. Indeed, these people represent a substantial share of the private regional entrepreneurial capital.

Regions without the critical mass needed to attract a permanent private operator should consider negotiating a time-sharing arrangement with one or more operators who would undertake to be present regularly one or more days per week or month to meet with local businesses, either spontaneously or based on a pre-selection by regional development agencies or any other intermediary organisation. Public authorities pay for the offices and possibly the cost of using the services provided.

Regional strategies need to consider the two dimensions above in order to strengthen:
• the take-up of high value-added services among businesses;
• the solvency of the regional demand for such services;
• the attraction to the region of providers of sophisticated services or one of their subsidiaries.

The best way for regions to maximise private sector know-how for the benefit of SMEs is to provide low-cost generalist strategic assessment complemented with specialist consulting services helping them to formalise their innovation and growth strategy.

2.7 From Incubation To gazelles
The aim of all innovation strategies is to hatch or grow entrepreneurial growth companies (EGCs or gazelles). This presupposes differentiated action to address business development (incubation) and growth (expansion).

Statistics on incubator performances show that they fulfil their business development role but find it more difficult to promote the emergence of gazelles. For instance, the outcomes of the incubator of Midi-Pyrénées (F) over eight years are as follows:

- 102 businesses accommodated out of 330 applications;
- 54 companies have left the incubator;
- 28 projects were terminated during incubation;
- 10 companies wound up;
- 40 million in venture capital raised;
- 450 jobs created.

The ratio of new jobs per business development is small: an average of 7 jobs in the 64 business that still exist. The ratio falls to 6.5 jobs per company if account is taken of the fact that 3 businesses alone created 59 jobs.

Many incubators show similar data. The managers of the incubator in Midi-Pyrénées are aware of the fact that one of the recurring issues facing accommodated companies is their financing capacity (generally €250,000 v. €500,000 ideally).

The concept of gazelles was defined as early as in 1979 by David L. Birch to characterise companies with a potential to create considerably more new jobs year after year over a period of three years. It seems that there are fewer gazelles in Europe compared to the US and that their average growth rate is slower too. This realisation is confirmed by an analysis of EU and US gazelle rankings. In 2006, the top 100 gazelles listed in Business 2.0 magazine created 90,000 new jobs (i.e. an average of 90 per company) while Europe 500’s top gazelles created only 150,000 (i.e. an average of 30 per company).

It seems difficult to predict which companies will become gazelles and to develop proactive policies for their benefit. Therefore, a scouting system is needed to spot them and determine which categories of support services are most suitable to consolidate their strong growth rates.

It is remarkable that US media focus more attention on gazelles than EU media and that the former are more famous than the latter because their products and services have become strongly branded consumer goods (Microsoft, eBay, Apple, Intel, Google, etc.), while EU businesses have developed niche or professional products (IBA, Dassault Système, SAP, Vestas Wind System, etc.).

By way of example, a diagram is presented below illustrating the value chain dedicated to the acceleration of the commercialisation of knowledge generated in Scottish universities developed and implemented by Scottish Enterprise, the Scottish regional development agency.

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58 For the period 2007-9, the incubator’s budget amounts to €2 million per year.
Graph 14  Knowledge commercialisation acceleration value chain

Demonstration → Access to incubators and research facilities
                Securing dedicated financial support

Entrepreneurship fairs → One-year financial subsidy to pay potential business developers' wages

Entrepreneur coaching → Access to the advanced support services supply chain and to the expertise of the Standford University (USA)

Incorporation

Seed finance → Access to the finance value chain (business angels, seed capital, etc.)

Access to the market

Source: Diagram from a speech by Mrs Margaret McGarry, Scottish Enterprise (UK)

2.8 Emerging markets

Industries including biotechnology, medical equipment, nanotechnology, renewable energy, eco-innovation, composite materials and ICT are called upon to grow thanks to strong innovation potential.

Therefore, it is legitimate for regions to deploy systems to attract or stimulate activities in these industries by supporting clusters, investing in RTDI programmes or financing centres of excellence.

Regardless of the industry that is supported, the recipe for success always includes the ingredients described in previous sections. It is remarkable that California in general and Silicon Valley in particular have transitioned so smoothly from ICT to biotechnology and renewable energy despite deeply-rooted knowledge-based economy fundamentals (talent, venture capital, entrepreneurship and social networks, agile public authorities).

Difficulties in leveraging the opportunities of emerging markets have led EU Commission services to conduct discussions on the concept of lead markets in order to recommend to public
authorities a number of measures promoting the development or growth of markets for the products and services of these industries.

The European Commission's initiative firstly identifies promising emerging markets to be supported by a concerted action based on in-depth analysis. It also designs a process to better streamline legal and regulatory environments and accelerate the growth of demand.

Based on the analyses, the following six markets were identified for the initial stage of the initiative:

- eHealth
- protective textiles
- sustainable construction
- recycling
- bio-based products
- renewable energies.

The Commission has identified for each sector measures to be taken with regard to legislation, public procurement, standardisation, labelling and certification, business support services, innovation, training and communication. The European Union's financial instruments will of course be used.

The documents are available from the Secretariat and on the ad-hoc e-platform http://ec.europa.eu/enterprise/leadmarket.htm

It goes without saying that the above considerations can apply to regions and be mainstreamed into a value chain or regional cluster.

While it is self-evidently in the interest of individual regions to carefully analyse they endogenous potential and attractiveness for emerging sectors, many will often conclude that their competitive advantage is limited to a niche industry that exists thanks to specific competences or talent, or to a role as integrators of new technology in traditional industries. While the latter realisations are less glamorous and ambitious, they can prove to be very beneficial in terms of generating regional added value and undoubtedly more profitable in terms of consumption of public financial resources.
CHAPTER 3 MATCHING SUPPLY AND DEMAND

3.1 Modernising the Triple Helix

As noted in the introduction, the triple helix is a traditional concept that needs reviewing to reckon with the importance of venture capital in SME finance (financial capital). The advent of the knowledge-based society also calls for greater attention to qualifications (talent capital) in the regional eco-innovation system.

The different types of regional capital to leverage can be presented in graphical form as follows:

**Graph 15  Forms of Capital to Leverage at Regional Level**

![Graph showing forms of capital to leverage at regional level]

They can be matched namely through clusters and be assessed through a value chain. These themes are discussed in greater detail below.

3.2 Clusters and competitiveness centres

There are many definitions of – and hence public approaches to – the concept of clusters and competitiveness centres these days. They all consider the spatial concentration of businesses and public or private institutions and educational establishments strengthening the industrial or technological value chain. Below are a few examples of definitions of the term “cluster”.

Cluster can be defined as follow:

- a geographically proximate group of interconnected companies and associated institutions in a particular field (M. Porter)
- groups of companies and/or services and all the public and private entities on which they, in some way, depend, including suppliers, consultants, bankers, lawyers, education and training providers, business and professional associations and government agencies (S. Rosenfeld)
- a tool for a collective learning process amongst enterprises and public organisations. This collective learning process should lead to productive gains for clusters members (Eurada’s Round Table of professionals in economic development)
- a source of innovativeness and competitiveness based on partnership and collaboration between business and public research institutions with the support of public and semi-public bodies (DG Research Expert group on Research Intensive Clusters and Science Parks)
- an association of companies, research centres and educational institutions of a given local area working in partnership (under a common development strategy), to generate synergies in the execution of innovative projects in the interest of one or more given markets with high growth potential (French new industrial policy).
- a local technological innovation system organised around universities and other public research institutions which have unique R&D themes and potentialities. Companies inside and outside the region are also expected to come into it (MEXT, Japan).
A distinction should nevertheless be made between spontaneous clusters set up by businesses themselves and those supported under public policies or even "regional politicians’ pet clusters", which exist only due to bonanza effects created by the availability of public subsidies. Some clusters can have global influence thanks to their technological excellence or their networks of transnational contacts.

When developing their cluster support policy, public authorities can choose between supporting:

- private initiative clusters (bottom-up);
- industry-specific clusters;
- clusters combining complementary technologies;
- niche clusters;
- clusters based on existing or emerging industries;
- RTDI-intensive clusters;
- global excellence clusters.

It goes without saying that the nature of support varies according to the type of approach that is chosen and regional competences.

Below is a tentative typology of clusters developed by a group of research intensive cluster experts.59

a) Spontaneous "bottom up" ones. Those clusters have started from a few regional stakeholders wishing to address a well identified need or opportunity through sharing knowledge and experiences in a loose informal network of committed organisations.

b) Publicly supported ones. Those clusters were born thanks to a "top down" strategy initiated by ministries (industry, research, education, regional development) in order to facilitate or urge stakeholders to work together to improve their competitiveness. Clusters methodology serves as a public policy instrument through which grants are provided to networks of regional stakeholders.

Clusters exhibit different degrees of formalised structure depending upon the maturity of the cluster, the degree of trust between actors and the complexity of what the cluster actors want to achieve and whether the cluster aligns and supports their own corporate objectives.

Other ways to classify clusters are according to:

- a) Their sectorial focus. Some clusters are very sectored focused, others are multi-sectored and/or technology focused.

- b) Their aims. Some clusters can be built to strengthen the trade capacities of their members and others to create or exploit new knowledge. This can be achieved through collaboration and a renewed portfolio of activities such as market research, research activities, supply chain linking or integration of technologies in other product or process innovations.

- c) Their openness. Clusters vary also according to the degree of openness and formal organisation. Some clusters have formal memberships based on fees or even have a status of clubs with restricted membership, others are much more loose with no defined boundaries and open to new partners and networks.

- b) Their geographical coverage. Some clusters have a regional impact zone; others can be transregional or national.

A cluster however must not be seen as a 'regional' phenomenon. Depending on the understanding of a 'region' in national contexts, the spatial size of clusters can be much smaller. It can be a local activity within a municipal area or between a municipality and its suburbs. Usually, cluster borders are not confined to administrative boundaries. This holds true for

clusters of all sizes. A local cluster can encompass different locations while a regional one extends over different administrative regions within a country or between more countries. However, transnational clusters do not rank at the first position of cluster organisation patterns, but are a possibility in regions bordering neighbouring countries.

Nevertheless, today, there are attempts to create transnational clusters supported by common transnational governance. Indeed, despite the fact that clusters are rooted spatially, clusters may comprise different locations connected by research and production networks. The 'meta clusters' develop in scientific areas at the edge of scientific and technological development in which one location does not provide the necessary knowledge input for research and innovation activities. Research and even production is distributed over several locations within a country, a continent or even between continents and the challenge is to identify and integrate parts of it in the most productive way. Core drivers of these clusters are multinational companies which organise their research and production activities around subsidiaries located in different countries and contributing to a local cluster each.

As stated earlier, clusters have so far operated mainly at a regional or local level. Crossborder co-operation has only recently become a part of the operations, usually on a case by case basis. However, in the first meeting of a newly established High-Level Advisory Group on clusters in January 2007 the French senator Pierre Lafitte, the founder of Sophia Antipolis, pointed out that: “To remain competitive Europe must build more world-clusters. This calls for more transnational co-operation between the different cluster initiatives in the member states.”

Furthermore, according to the recent Commission's communication on innovation, more and better transnational or crossborder European co-operation are essential in order to attain critical mass and improve strategic orientation. This new approach will give the chance to generate world-class European clusters. In the past we have seen that clusters at a regional or even national level often lack a wider view. Therefore it was essential to develop a new strategic orientation. Interregional or crossborder alliances will integrate regional efforts, will identify and contribute to the removal of barriers preventing closer co-operation between clusters and foster the development of common actions, technology projects and mutual learning among the regions. As an example of such interregional cluster, we can mention 'Eindhoven – Leuven – Aachen Triangle (ELAT)'.

To summarize, regional stakeholders have to carefully assess what is the real potential of the region for clusters before investing in them, as very few regions have a real potential to create world-class high tech clusters and only a few can claim to become European or national champions. For those other clusters, they might focus their activity on upgrading their existing manufacturing base through greater support for innovation and through technology and knowledge transfer before aspiring to become innovative clusters.

In some countries such as Belgium, France and Japan, several networks coexist. Indeed, clusters exist alongside competitiveness centres in both Belgium and France, while in Japan, clusters are supported by two different ministries, i.e. METI (Ministry of Economy, Trade and Industry) and MEXT (Ministry of Education).

The fundamental principles applying to clusters and competitiveness centres are the geographical location of their members as well as interactions between them. Clusters can be assimilated to crossroads between vertical links (connections between public authorities, RTD centres or universities and businesses) and horizontal ties between complementary organisations (businesses and financial, logistical, advisory and other services).

Clusters organise their membership of economic stakeholders including:
- companies, both small & medium-sized and transnational;
- managers of community infrastructure: research and technology transfer centres, universities and their business interfaces, incubators, science parks, technological parks, etc.;
- intermediary bodies: chambers of commerce, business clubs, specialist public agencies such as regional development or innovation agencies, etc.;
the private sector: consulting, banking, insurance, business lawyers, etc.;
public authorities.

Clusters must yield benefits for both regions and businesses in fields including:
knowledge development;
occupation skills development;
RTDI stimulation applied to markets;
individual or collective entrepreneurship;
commercialisation of innovative products and services.

In short, although they are competitors, clusters have to bring their members competitive advantages derived from their complementarity or cooperative activities.

Thus, public authorities can contribute to cluster development by:

- financing RTD activities;
- strengthening the catalyst effect of clusters, i.e. networking or shared service provision;
- promoting business growth;
- increasing investment in human resources as well as the attraction and retention of talent;
- accelerating the process of commercialisation of innovative ideas;
- developing economic and technological intelligence services;
- strengthening any and all types of cooperation at both regional and international level.

In the field of economic intelligence, efforts need to enable adequate anticipation of changes in markets or production processes due mostly to automation, digitalisation, outsourcing, offshoring or even the customisation or commodification of products and services. Economic intelligence should also enable SMEs to detect the best partners of their growth on research, component or product and service markets. The latter’s specialisation requires SMEs to establish adequate structures and competences to meet the specific requirements of those three markets.

In future, the networking function will become a key element of SME and regional competitiveness.

As indicated above, clusters must serve to improve cooperation among their membership. The cooperation formats described below can be implemented in a regional or trans-regional context, notably within the framework of interclusters.

There are many types of collaboration possible within industry, this is across organisational barriers (inter) or intra-organisational, all of which are important and have a common element - people.

- **Strategic alliances**
  Collaboration between two or more companies designed to achieve some corporate objective. This may include international licensing agreements, management contracts or joint ventures.

- **Joint ventures**
  When two or more businesses co-operate to run a project together - often a separate joint venture company will be established in which the various partners own a share. A joint venture is limited to one project while a partnership forms the basis for co-operation on many projects.

- **Project based bids**
  When two or more organisations jointly work on a project tender, collaborating to supply a bid for a main contractor / client organisation. This is often run with a lead contracting partner who is in charge of the bid and who joins the bidding team.

- **Supply chain partnering**
  This is defined as collaboration between same industry organisations that collaborate to deliver a contract of work. This would be a one off collaboration for a particular piece of work and might involve competitors collaborating to deliver a product together, as they could not do it alone.
- Product development teams
  A common industrial collaboration, which is intra-organisational, and vital to an organisation’s innovative success, is that of new product development teams. A facilitative process that enhances the working practices of this collaboration is of great benefit.

- University collaborations
  A common collaboration is that between university and industry, which often involves several project partners, e.g. European project teams. Frequently, if it is an international collaboration, the complexities of the venture increases when cultural and language issues are added to the mix.

- Non-competitive collaborations
  Collaborations can begin for a variety of reasons. Often these can be non-competitive, for example a special interest group of industry experts. Without the urgency of a competitive outcome these collaborations can dwindle yet are very important especially as knowledge sharing is a benefit of such collaborations.

- Regional
  Firms who are co-located have the added advantage of being able to meet face-to-face and an industry specific network or cluster group is a common example of a regional collaboration initiative.

- General project teams
  All people based group invariably have to collaborate, so some of the processes developed can also be applied to smaller groups and teams that are together over a period time or a period of a project.

Worth pointing out is that cluster performance hinges to a large extent on the quality of their coordination team, their list of contacts and their industrial competences. Remarkably, the French Clusters Association CDIF delivers a training programme for cluster managers in order to professionalise this role. Such training is especially useful where support service provision is fragmented, institutions are compartmentalised and the regional social capital is low.

Finally, cluster developers need to take care of SME involvement both in cluster governance and as users of the services and other advantages provided by clusters. Also, complicated financial schemes and long delays in securing subsidies often dissuade SMEs from actual involvement in clusters.

3.3  The regional innovation value chain

The members of EURADA and an expert group convened by DG Research of the EU Commission have developed a graphical representation of the main components of an RTD-intensive cluster / competitiveness centre value chain (see below)60.

This value chain may become a regional innovation strategy development toolkit as it puts infrastructure and intermediary organisations as well as all intangible factors in perspective with potential business needs. Indeed, such a value chain enables the strengths and weaknesses – as well as any shortages – of the regional innovation ecosystem to be assessed, thereby allowing regional innovation strategy developers to take the most appropriate measures to strengthen its weak links.

This assessment reveals the missing links of the chain and highlights overlapping or redundant links represented by a plethora of stakeholders –often also the ones with the lowest added value.

The value chain also emphasises the importance of regional governance and leadership and in particular of a genuine commitment by public authorities to support innovation.

This approach requires leadership, political boldness (governance) and investment commitment, i.e. the three most important intangible parameters of any strong, committed public innovation policy.

Such a value chain should ideally include the following parts:

(i) Awareness and investment readiness. Researchers and university senior managers have indeed to be convinced of their ability to contribute to the creation of business and the commercialisation of research leading to the growth of regional clusters. Their contribution can for instance take several or all of the following forms:

- providing specialised training and workforce development opportunities,
- attracting and retaining talent,
- investing in entrepreneurship and innovation culture,
- addressing entrepreneurial RDT needs,
- providing assistance to start-ups (student placements, teachers, researchers) in order to technologically and commercially validate their business ideas and provide solutions to real needs,
- providing support to existing SMEs to enhance their RDTI absorption capacity
- building appropriate infrastructures from pre-incubators to science parks
- managing IPR and technology transfer and knowledge transfer interfaces or centres,
- taking stake in spin out or seed capital funds,
- integrating transnational partnerships.

Intermediary organisations have to fulfil an important task in helping research and university representatives to understand and speak the same language as the one used by businesses and to solve the asymmetric information gap between the long-term fundamental research expectations of researchers and universities and the short to medium term commercial imperatives of enterprises and the application of research. They also play an important role in creating an identity or a brand for the clusters.

(ii) Organisational infrastructure availability. Public, private and higher education institutions need to invest in RDT infrastructures and facilities. Due to the fact that investments in such assets are becoming increasingly expensive, cluster stakeholders have to consider new forms of Public-Private Partnerships and joint ventures.

(iii) Market driven and applied research activities - clusters aim at providing solutions to the RTD needs of enterprises. Those needs might be either outsourced TD/innovation activities, in house RTD/innovation activities supported by external researchers or student or risk shared RTD/innovation.

This issue can be tackled through support schemes aiming either at helping universities and research centres provide assistance to SMEs (direct support or student outplacements) or at helping enterprises procuring services or consultancy advice from research or academic institutions.

**The instruments**

The central component of the value chain includes 5 instruments facilitating the innovation process consisting of:

(i) The networking or clustering process through which the demand and offer for research/innovation services are matched and through which pre-competitive and collaborative research projects and programmes are defined and implemented. This process also helps promote regional innovativeness and dissemination of new technologies. It also secures better technology and market intelligence and commercial co-operation or partnering. Those networking activities will help enterprises to access technology and commercialisation intelligence and audit, prototyping and test or technological centres. They will support
partnership and supply chain development, and interface opportunities with research centres and high education institutions.

(ii) Protection of IPR and promotion of incentives for scientists to protect their research results. Encouragement of technology transfer and quality management.

(iii) Promotion of skills, education, training and student placements in enterprises but also encouragement of companies engaging in developing their own work force. Those investments are essential in successful clusters as they provide the right type of human capital allowing enterprises and universities or research centres to strengthen their labour force without contributing to their overheads significantly.

(iv) Entrepreneurial training and culture. Those are cluster activities which allow clusters to bring research ideas and results to markets by boosting start-up creation and helping them develop their business and marketing skills and testing whether or not there are routes to market for their products and services and whether or not they are commercially viable. Special attention should be given to the use of external consultants and knowledge experts by SMEs as well and innovation management and leadership capabilities in SMEs.

(v) Access to funding sources (Business angels finance, Pre and seed capital, Venture capital, Repayable grants, Proof of concept funding, University / Research centre spin out / spin off fund, Mezzanine funding). The non availability of equity and other types of funding is often the major reason of a lower rate of high-growth SMEs (gazelle creation) in European clusters compared with the most dynamic ones in the USA.

The Outputs

The last part of the value chain deals with outputs, i.e. spin off and spin out formation, commercialisation of research results in the form of new products or services or increased market shares. This part should provide the main performance indicators for the clusters.

Regions have or attract above average talented people, innovators, entrepreneurs and creative workforce. Clusters also generate jobs, better wages, growth, public knowledge which can be used by all stakeholders and local enterprises. They are able to drive the regional research agenda on the basis of market needs.

Performant clusters provide enterprises with a range of competitive advantages, which impact their profits and growth through cost reduction and/or sales increase. Those advantages are related to research and innovation, access to funding sources and human capital as well as to sectored issues. In the field of research and innovation, a cluster will reduce the costs linked with those activities through cheaper (shared efforts), easier and quicker access to information, knowledge, infrastructure, capacities and capabilities (network and scale effects). Clusters also enable enterprises to access human resources and attract talents and highly qualified skills (reputation, branding effects). The most dynamic clusters are able to attract different types of investors (business angels and venture capitalists), serial entrepreneurs and top class service providers. Clusters create a good business environment which helps to reduce the risk related to the commercialisation of research results and market introduction of new products and services. They also improve the RDTI absorption capacity of existing SMEs. Being part of a cluster offers SMEs opportunities to avoid some of the disadvantages they usually face (asymmetry of information, distrust of public procurement authorities, etc.) by bringing them close to the different stakeholders of the cluster value chain. Finally, enterprises can through the clusters improve the representation of their sectored interest (lobbying).

Clusters have in fact to facilitate the "Research, Innovation, Market" process and in particular they have to speed up the "research idea to market" process and, vice –versa, the market needs into research projects.
Graph 16  Value chain for research intensive clusters

**Pre-requisites**

**Assets**
- Human capital
- Technological capital
- Financial and equity capital
- Social capital
- Infrastructure

**Public sector**
- Interinstitutional collaboration
- Governance
- Leadership
- Vision
- Attractiveness
- Investment willingness

**Private sector**
- Capacities
- Critical mass
- Sound financial enterprises
- Investment readiness
- Engagement in a research regional agenda

**Intermediaries**
- Quality infrastructure
- Competences
- Capability

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**Implementation**
- Consensus building
- Strategy design to support research intensive firms and commercialization of research results
- Delivery mechanism of the strategy

Source: EURADA Round Table of Practitioners in Economic Development and RIC Expert Group
The table below presents examples of action taken by regional development agencies as part of the value chain presented on the previous page.

Table 11  Breakdown of the value chain and examples of action taken by EURADA members

<table>
<thead>
<tr>
<th>Value chain links</th>
<th>RDA</th>
<th>Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>ASTER</td>
<td>Link-up</td>
</tr>
<tr>
<td></td>
<td>CEEVO Val d’Oise (F)</td>
<td>RTDI week in Val d’Oise</td>
</tr>
<tr>
<td></td>
<td>IMPIVA Valencia (E)</td>
<td>RENAC: Network for nanotechnology applications in materials and products for habitat</td>
</tr>
<tr>
<td></td>
<td>ADIRA Bas-Rhin (F)</td>
<td>Researcher &amp; business club</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>IGRETEC Charleroi (B)</td>
<td>Aéropole (aerospace technology centre)</td>
</tr>
<tr>
<td></td>
<td>JYKES Jyväskylä (FIN)</td>
<td>Agora Wellness Lab</td>
</tr>
<tr>
<td></td>
<td>Shannon Development (IRL)</td>
<td>Limerick Science Park</td>
</tr>
<tr>
<td></td>
<td>Scottish Enterprise (UK)</td>
<td>Aberdeen Energy Centre</td>
</tr>
<tr>
<td>Market-driven research</td>
<td>LIOF Limburg (NL)</td>
<td>Research Vouchers</td>
</tr>
<tr>
<td></td>
<td>ASTER Emilia-Romagna (I)</td>
<td>Spinner</td>
</tr>
<tr>
<td></td>
<td>Scottish Enterprise (UK)</td>
<td>Research to revenue pipeline</td>
</tr>
<tr>
<td></td>
<td>South West of England RDA</td>
<td>Grants for research and Development</td>
</tr>
<tr>
<td>Networks, clusters,</td>
<td>Midi-Pyrénées Expansion (F)</td>
<td>Aerospace valley</td>
</tr>
<tr>
<td>competitiveness centres</td>
<td>AIDA Andalucia (E)</td>
<td>Marble</td>
</tr>
<tr>
<td></td>
<td>Advantage West Midlands (UK)</td>
<td>Food &amp; drinks, tourism, KIBS</td>
</tr>
<tr>
<td></td>
<td>ERVET Emilia-Romagna (I)</td>
<td>Farm implements</td>
</tr>
<tr>
<td>IP rights and technology transfer</td>
<td>Scottish Enterprise (UK)</td>
<td>Intellectual Assets Centre</td>
</tr>
<tr>
<td></td>
<td>London Dev. Agency (UK)</td>
<td>London Technology Network</td>
</tr>
<tr>
<td>Training, skills and value-</td>
<td>AGIT Aachen (D)</td>
<td>Innovation competition plan</td>
</tr>
<tr>
<td>added services</td>
<td>LIOF Limburg (NL)</td>
<td>Research Vouchers</td>
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<tr>
<td></td>
<td>Scottish Enterprise (UK)</td>
<td>Research to revenue pipeline</td>
</tr>
<tr>
<td></td>
<td>IMPIVA Valencia (E)</td>
<td>Electrical Technology Institute</td>
</tr>
<tr>
<td>Access to funding sources, proof</td>
<td>AIDA Andalucia (E)</td>
<td>Campus</td>
</tr>
<tr>
<td>of concept, spin-offs</td>
<td>Scottish Enterprise (UK)</td>
<td>LINC Business Angels</td>
</tr>
<tr>
<td></td>
<td>Enterprise Ireland (IRL)</td>
<td>Proof of Concept</td>
</tr>
</tbody>
</table>

Source: EURADA
CHAPTER 4   INTERNATIONALISATION OF TECHNOLOGICAL SMEs

Public authorities need to develop internationalisation policies for innovative businesses and even possibly for intermediary bodies including clusters. This effort can deliver three kinds of benefits: improved competitiveness for local SMEs, more technology-intensive local SMEs and stimulated acquisition of technology.

Worth recalling is that large corporations adopt “open innovation” practices – per a concept namely warranting a redefinition of public internationalisation policies to include an RTDI dimension –described as follows by A.G. Lafley and Ram Charan\(^{61}\) based on the experience of Procter & Gamble: "to reach out innovation from any and all sources, inside and outside the company. Innovation is all about connections, so to get everyone we can involve: Procter & Gamble past and present staffs, consumers and customers, suppliers, a wide range of "connect-and-develop" partners, even competitors".

Furthermore, since only technological start-ups become global leaders – because they mainstream the international dimension right from their development –, it is increasingly important to provide regional SMEs with a range of available support services based on internationalisation.

Worth mentioning among them are:
- economic intelligence;
- proof of concept (technology and market) demonstration by foreign experts;
- recruitment of talent or provision of coaches;
- access to specialist RTD or prototyping equipment;
- temporary accommodation in business hotels.

According to a Finnish survey entitled "International R&D in high growth SMEs – Implications to innovation policy\(^{62}\), public authorities can help the internationalisation process of technological companies by supplying them with support services in the six areas below:

1. knowledge of international market and technology demand
2. strategy development for international R&D activities
3. identification and selection of partners
4. identification, selection and acquisition of technology
5. skilled personnel
6. funding for international core, close-to-market and supporting R&D.

In some cases bold regional outsourcing or offshoring support policies should be deployed in order to help SMEs acquire components – including knowledge – at affordable prices, thereby enabling them to remain competitive and hence ensure their long term survival.

These days, there are definitely one or more good reasons to compare the expertise available in-house in all departments – research, innovation, production, marketing/sales – with that available around the world. A detailed segmentation of regional business needs reveals the advantages they could derive from an internationalisation strategy. The table below illustrates this concept.

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\(^{61}\) Game Changer: How you can drive revenue and profit growth with innovation.

<table>
<thead>
<tr>
<th>Business functions</th>
<th>International services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Joint research</td>
</tr>
<tr>
<td></td>
<td>Access to equipment</td>
</tr>
<tr>
<td></td>
<td>Establishment (FDI)</td>
</tr>
<tr>
<td>Innovation</td>
<td>Joint development</td>
</tr>
<tr>
<td></td>
<td>Proof of technological concept</td>
</tr>
<tr>
<td></td>
<td>Proof of economic concept</td>
</tr>
<tr>
<td></td>
<td>Licensing and transfer of intellectual property</td>
</tr>
<tr>
<td>Production</td>
<td>Outsourcing</td>
</tr>
<tr>
<td></td>
<td>Offshoring</td>
</tr>
<tr>
<td></td>
<td>Subcontracting</td>
</tr>
<tr>
<td></td>
<td>Establishment (FDI)</td>
</tr>
<tr>
<td>Marketing</td>
<td>Market testing</td>
</tr>
<tr>
<td>Distribution</td>
<td>Economic intelligence</td>
</tr>
</tbody>
</table>

Source: EURADA
CHAPTER 5  CREATIVITY AND KNOWLEDGE

5.1 The challenges of the knowledge-based economy

There are in theory no limits to the knowledge resources available to a country or region — in contrast to raw materials, for example — but optimum use of these resources requires an adequate cultural, educational, administrative, legal and tax framework. Structures must both favour and stimulate:

- creativity and the acquisition of creative capacities
- the spirit of enterprise and innovation
- the development of talent, and the ability to attract and retain talent
- cross-fertilization of expertise
- commercial applications of research results
- venture capital investment
- internationalization of thinking and planning
- markets and profits.

Regions will therefore increasingly depend on access to technology, knowledge and competences.

Only when these conditions are met can there be any real assurance that knowledge will generate new knowledge without exhausting the possibilities of the sectors concerned. In the future, the value of a region's overall knowledge offering may well be the crucial measure of its wealth.63

Can there be any lasting credence in the idea that the global economy is divided into two compartments, one consisting of developing countries offering competitive production bases founded on low wage costs, and the other of developed countries that are the focus of creativity, research, original design, innovation and quality? This question is worth asking considering trends in developing countries, where:

- University education is seeing exponential growth.
- Public and private64 investment in R&D and innovation is rising steadily.
- Attractiveness is on the rise for R&D centres of European and North American multinationals.65
- Local businesses are making increasing commitments to innovation, design, quality and branding.
- Local talents will sooner or later move on from imitation to innovation, and overcome the quality failings that emerged during the summer of 2007.
- At the same time, European competitiveness clusters and other focuses of expertise are too inward-looking due to a lack of strategy or an inadequate international presence.
- Entrepreneurs and professional are in some cases returning to their native countries, reversing the so-called brain drain.

The knowledge society can shift the balance in development opportunities. A number of studies and ranking s (e.g., from Shanghai Jiao Tong University and Business Week), show that China, India, South Korea and other developing countries have achieved high levels of excellence in scientific and technological training. Fortunately, innovation is for the moment not only a matter of ideas or creativity, but also of organization and market approach. In some sectors, customer-centred innovation is critically important to effective responses and anticipation of demand, as illustrated by examples including Apple's iPod, Zara, Renault's Logan and Starbucks.66 In this

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63 See Alvin and Heidi Toffler, "Revolutionary Wealth" (Knopf, 2006)
64 SAIC Motor Corp. has just invested €180 million in its research centre at Jiading (Shanghai)
65 According to some studies, 400 multinationals already have research and technology centres in China, compared with 77 in India. The city of Shanghai's website claims 150 research centres.
66 See Innovation Tribune, Blog Innovation and Entrepreneuriat, among others.
area, the businesses of the west will probably hold onto their lead on rivals in developing countries for a few more years.

There is however a need to accept that the argument according to which only low-skilled jobs can be offshored will not much longer resist the reality of globalisation\(^{67}\). Indeed, a closer look reveals that jobs are threatened wherever they can be replaced through automation, outsourcing or digitalisation. Therefore, constant ICT innovation increases the number of professions that are potentially at risk. This will have increasingly sizeable consequences in the services industry and in the administrative departments of companies.

It should encourage public authorities to carefully analyse their potential and ability to:

- create knowledge, either spontaneously or as part of a system facilitating solutions to the problems facing regional businesses;
- transfer the knowledge developed within or transferred into regions. This transfer may take several forms: business development, improved products and services or regional knowledge, etc.
- absorbing knowledge, whether locally available or imported.

In this context, universities and key regional stakeholders will need to develop strong partnerships based on mutual or shared areas of interest.

5.2 Public policies and creativity

National and regional authorities can contribute to the emergence, preservation and reinforcement of the competitive advantages of businesses in creative industries through initiatives targeting:

- clusters and other competitive groupings
- venture capital funds specialized in financing for creative industries
- centres specialized in the promotion of intellectual property rights
- design centres
- technical centres
- business real estate
- business intelligence
- support for the registration of patents, commercialization of innovative ideas (proof of concept) and identification of unutilized entrepreneurial ideas (spin-offs)

Some examples of good practices adopted in European regions are given below.

- Seed capital funds for creative industries: London Development Agency (UK), Advantage West Midlands (UK), SEE Finance (UK), ICIC Cataluna (Spain)
- Design centres: Lyon (France)
- Centres for the commercialization of intellectual property: Wales (UK), Scottish Enterprise (UK)
- Clusters: Flanders (Belgium), Cholet (France), Cosmetics Valley (France), Pôle 16000 Images (France), West Midlands (UK), Jyväskylä (Finland)
- Business real estate: 12,000 sq.m. fashion and design centre to open in Paris in the first half of 2008.

In France ADEME, the Agency for the Environment and Energy, puts out calls for projects in the field of eco-design, encouraging R&D centres to make creative use of renewable materials in items for daily use., while at European level the European Association for Creativity and Innovation aims for a better understanding of innovation management , its acceptance and practice in Europe (www.eaci.net). EACI places special emphasis on cooperation and cross-fertilizing among universities, businesses, and teachers in the field of innovation and creativity.

\(^{67}\) Cf. *The World is Flat*, Thomas L. Friedman.
In the UK, a 2005 report entitled "Review of Creativity in Business: Building on UK Strengths" underscored the importance of investing in creativity and design for SMEs keen on boosting productivity and performance. As the Cox report noted "The intelligent application of creativity and design allows businesses of all sizes to access new, global markets by increasing the distinctiveness of products and services and competing on the basis of the added value of their unique appeal to consumers".

The review focused on two broad areas: building a stronger relationship between businesses and creative professionals, and strengthening the links across university departments and with industry.

The review concludes that a lack of awareness and understanding of the role that greater creativity can play in business is a key barrier to SMEs making greater use of creative skills. It recommends a number of measures to tackle this:

- raise the profile of the UK's creative capabilities through a national network of creativity and innovation centres;
- engage SMEs and demonstrate the practical benefits of applying creativity through the availability in each region of the Design for Business programme of support;
- increase the understanding of creativity and innovation in the boardroom by recruiting people with creative experience onto company boards;
- educate senior business people by including creativity on the syllabus of the Institute of Directors' Chartered Director programme; and
- use the broadcast media to encourage creativity and innovation.

The review makes a number of specific recommendations to develop better linkages between creativity and other disciplines:

- build cross-disciplinary capabilities in business, engineering, technology and creativity through new educational centres of excellence;
- establish closer links between universities and SMEs; and
- ensure that higher education courses better prepare students to work with, and understand, creative specialists.

The report shows that the main — real or perceived barriers to use innovative design by SMEs are: cost, lack of in-house design or creative skills, lack of customer demand, manufacturing or development issues, access to external design or creative skills, ...

The report led to the creation of a first centre of excellence in London by the Royal College of Art, the engineering school of Imperial College London and Imperial Tanaka Business School. It is backed by an initial investment of £5.8 million.

### 5.3 The contribution of creativity to sector reconversion

Creativity and the capacity for innovation within a region can be significant sources of new relative advantages where industrial sectors suffer from a loss of competitiveness. Examples include the strength of some French regions in technical textiles and that of some UK regions in areas relating to Formula 1 automobiles, where over 4,000 businesses are involved. Equally, while Europe has lost the merchant shipbuilding market (bulk cargo vessels, oil tankers, gas carriers, container ships), companies such as Aker Yards (N), Fincantieri (I), Meyer Werft (D) dominate the world cruise ship market thanks to technical design expertise.

In some cases, innovation can keep production plants from closing down — albeit perhaps temporarily. The Seb plant in Is-sur-Tille (France) is an example: its existence reflects a policy of innovation on site.

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69 Les Echos, 7.4.08
70 Les Echos, 25.10.07
In another example, Belgium’s Noukies, specialized in plush toys for children, was losing ground until it developed a range of children’s wear and a series of cartoons based on its star product, winning a new lease of life.

In the future, revamps of this type, based on the capacity to innovate, are set to become increasingly important in Europe as sales volumes for many industrial sectors in the developed world reach saturation point. Businesses will thus have no option but to differentiate their offer, either by creating high added-value products with higher profit margins, or by developing concepts based on well-being or unique experience to justify a higher price. In this case, innovative technology will need to call on creative flair in marketing, design, packaging and even distribution networks. Government authorities can help SMEs to develop effective industry watch services and programmes.

5.4 Public financing for creative industries

As indicated in the previous section, venture capital funds specializing in creative industries have been set up, mainly in the UK, where the sector also benefits from the support of specialized development agencies.

Creative London is one of these, providing support that includes advice, business incubation facilities help with access to financing, protection for intellectual property rights and access to production studios at attractive rates. The agency also manages a venture capital fund with £5 million for individual equity investments between a minimum of £70,000 and a maximum of £500,000. Its website home page delivers a clear message “Creative Industries shape London’s Future. Ideas are Britain’s fastest growing exports.”

In the north of England, the Creative Investment Development Agency (CIDA) based in Huddersfield has provided professional services and other support for nearly 3,000 businesses, including 350 start-ups, since its launch in 2000. To this end, it has raised over €16 million in venture capital financing and now has an annual budget of €1.5 million, employing 18 people compared with just two at the beginning. CIDA also benefits from EU funds (ERDF and ESF).

In the Netherlands, the Dutch Creative Fund set up in 2006 offers support ranging from €20,000 to €40,000 to support business starts in creative sectors.

5.5 From manufacturing clusters to knowledge clusters

Current thinking on clusters centres on conglomeration effects associated with the concentration of a broad range of functions and knowledge relating to a given activity in a single area. Yet with the emergence of centres of excellence in an increasingly large number of countries and regions, multinational firms are tending to break up the geographical bases of their value chain, locating or relocating certain functions in regions offering the desired capacities and types of talent.

Authorities need to take their cue from this trend, and adapt support for regional clusters to match the new geographical breakdown of knowledge and competencies, forging new alliances between clusters in different countries and in complementary fields.

On this point, it is worth referring to the report of the Forrester Research consultancy (The Forrester Wave: National Innovation Network Q4 2006), which argues that the biggest failing of most innovation programmes is that they consider countries as closed systems, as if they each had to have their own innovative capacities. Counter to this view, Forrester advocates a global ecosystem of cooperative innovation bringing together countries, businesses, universities and other organizations. Within such a network, individual countries play specific roles in discovery, transformation, financing and intermediation according to their various capacities. In this context, the regions have to rid themselves of protectionist reflexes to make the most of their own strengths with the support of the complementary strengths of others. This is even more true of cluster managers and organizations in charge of economic intelligence than of regions, since it is even harder for them to acquire critical mass at all key points along the value chain of innovation and market exploitation of new ideas.
The pertinence of these recommendations is backed up by another study, entitled “Innovation Networks: Global Progress Report 2006”, which points out that “across industries and regions, firms are abandoning vertically integrated innovation approaches in favour of innovation networks – global partner ecosystems that co-develop and co-market new products, services and business models – and reaping big benefits. CEOs can drive and accelerate innovation network adoption by developing a secure and scalable collaboration infrastructure and investing in new skills to broker and orchestrate cross-firm innovation partnerships.

5.6 Free zones for research and innovation?

To get a better grip on production costs, many countries have developed industrial free zones. Why should European regions not develop free zones dedicated to research and innovation? Businesses and investors in these zones could be offered maximum fiscal benefits, including sales, to promote RDT activities, innovation and the marketing of research findings.
CHAPTER 6  GOVERNANCE

6.1 Regional development trajectories

In principle, regional development can focus on one or more of the following options:

- Leveraging region’s natural, cultural and tourism potential;
- Enhancing their function as services and commercial centres for their hinterland;
- Strengthening their productive basis as a link in one or more industrial supply chains (“screwdriver plants”);
- Leveraging the collective innovation capacity and the ability to adjust to market or technology changes;
- Harnessing their knowledge and talent in sectoral or scientific centres of excellence.

Regardless of eventual regional choices, success will be possible only by carefully articulating regional physical (infrastructure) and intangible assets whilst ensuring that public provision of innovation support services meets the requirements of the private sector and in particular of SMEs as the genuine drivers of regional dynamism.

In some cases, public provision needs to ensure a more fluid flow of knowledge locally and to improve its absorption capacity by regional SMEs. This requires substantial investment in training, human resource development and talent retention.

Unfortunately, this kind of investment does not attract media attention and its return on investment is not easily measured. It is therefore poorly attractive in terms of notoriety for politicians compared to infrastructure investment. However, regions and businesses alike face the “innovate or die” dilemma these days. And innovation should be understood in two different ways: turning regions into innovation centres and innovating in terms of the contents and delivery of regional strategies.

In this context, regional development is no longer achieved only via provision of infrastructure but also through its use by business managers, which in turn hinges on their creativeness and competences. Also worth recalling is that regional innovation is not measured by the number of regional patents but as the ability of regional firms to turn new ideas into turnover, profit and jobs.

In the near future, European regions will no longer be able to rely on the creativeness of their population to deliver development. Fortunately, unlike raw materials, this potential is theoretically inexhaustible – though investment in education and science & technology is observably levelling off everywhere, the culture of entrepreneurial excellence and success is losing its prestige, and there is growing hesitation among university graduates when it comes to creating their own business. This too, justifies a more careful analysis and a reinforcement of the intangible assets of all regions.

As with businesses (see Part 3, Chapter 1), the added value of regions depends on intangible assets these days – i.e. mainly their population. Indeed, regional dynamism rests on factors including:

- leadership;
- training, skills and talent;
- creativeness;
- the entrepreneurial and innovation spirit;
- the circulation of knowledge – and hence the quality of networks;
- the reputation of universities and their involvement in regional development;
- the perception of the level of financial risk;
- the internationalisation capacity of commercial or technological entities facing novelty or change.
These success factors also apply to the public sector. Some players call this realisation “governance”.

6.2. **When copying a regional strategy, can you mirror its benefits too?**

In the field of economic development, is it possible to copy a model developed by another region irrespective of its degree of success? We conclude that the answer to this question has to be no, in the sense that it is increasingly evident that the difference between success and failure in any regional strategy is a function of intangible factors rather than infrastructure, administrative pronouncements or policy-makers’ wishes.

These days, the main intangible factors that combine to deliver the regional competitive edge relate to elements including:

- an entrepreneurial, venture-prone culture;
- the anticipation of new needs;
- governance;
- leadership;
- social capital;
- a critical mass of finance and talent;
- serial entrepreneurs;

i.e. factors that cannot be moved from one place to another.

In this context, basic infrastructure is only a prop—i.e. important but not decisive. And the same is true of administrative and intermediary bodies, especially as for historical reasons they often duplicate or even compete for, public subsidies that ensure their survival—but not necessary their legitimacy—and actually thwart any attempt to promote change.

Let us imagine for a minute an “economic development expert or team” from region A embarking on a fact-finding mission and landing in San José (Silicon Valley), Durham (Research Triangle) or Boston (the starting point of Route 128). What will he/she/they see?

- an airport;
- roads and rail tracks;
- at least one university or other academic institution;
- business parks and shopping malls;
- one or more (pre)incubators;
- private, public and university research centre laboratories;
- a technology centre;
- teachers, students and researchers;
- businesspersons and SMEs;
- a university/business interface;
- venture-capital fund managers;
- an intellectual property development unit;
- a nondescript structure meeting any of the definitions of clusters or competitiveness or excellence centres;
- one or more development strategies geared toward promising tech industries;
- (semi)public intermediary bodies;
- a cultural centre, a golf links, and possibly a marina;
- elected representatives and a local or regional administration;

i.e. a whole range of concepts with which he/she/they are familiar if he/she/they come from any average European region, city or town. Except that contrary to his/her/their hometown, those few areas have become famous development models!

This confirms that what makes the difference between any two regions lies either in better regional branding and marketing as well as in the reputation management or in other, more subtle ingredients, i.e. more difficult to identify and consequently to replicate, especially since—as shown below—they relate to human factors, namely trust and confidence, culture (hierarchy
vs. open decision-making process) and guarantee of stability. In other words, or so the saying goes: "people make the difference!"

Added to this realisation are also other parameters including a critical mass of finance and talent as well as investment willingness and readiness, which are comparatively less evident in Europe.

Actually, the main differences our visitor(s) would notice are:

- a higher number of foreign entrepreneurs and talents;
- an active business angels community;
- a well-funded seed and venture capital industry;
- networks of pragmatic-visionary decision-makers trusting a clearly identified leader;
- punishment meted out by the market rather than an institutional problem-solving approach;
- faster risk-taking and—consequently—decision-making.

The aim of the argument below is to establish that up-to-date public policy cannot be satisfied with infrastructure but needs to pay greater attention to concepts including:

- investment willingness and readiness among both public and private operators;
- networking key stakeholders.

The level of performance of infrastructure investment is closely connected to:

- available financial resources, with a view to promoting optimised use of said infrastructure;
- effective involvement of the private sector in defining and implementing projects, including possibly their funding;
- the quality of human resources managing newly-developed infrastructure;
- the networking of key stakeholders involved with both the supply and demand sides of infrastructure usage;
- the relevance of support measures aiming to promote appropriate use of newly developed infrastructure.

Thus, public authorities need to pay ever-closer attention to a range of aspects such as:

- harnessing the regional social capital with a view to improved leveraging of investment efforts;
- changes in the regional supply chain resulting from investment and the need to take follow-on measures to maximise the latter’s beneficial impact, namely in terms of SME take-up of schemes and the resulting generation of value added;
- training intermediary bodies to detect new, as yet unexploited opportunities for existing SMEs or potential investors;
- performance levels of regional infrastructure compared to other territories;
- new opportunities for transnational cooperation arising from investment operations.

i.e. a conjunction of intangible factors calling upon creativeness and knowledge development.

6.3. The importance of intangible factors

There is little doubt that the quality of infrastructure is a determinant of economic development. However, investment in infrastructure is neither an absolute precondition of economic growth nor a guarantee of successful regional development. For instance, how many industrial parks, technology centres and incubators look more like “cathedrals in the desert” than competence centres? The causes of failure are undoubtedly to be found in the following mistakes:

- public authorities seduced by fleeting fashions;
- bad choice of locations;
- absence of a critical mass of entrepreneurs;
- lack of adequate resources to support potential users in order to maximize the benefits from infrastructures;
- public interventionism dictated by supply rather than an analysis of demand;
faulty interpretation of a concept imported from another region;
lack of available, earmarked financial resources;
failure to anticipate changes in scheme lifecycles;
lack of operator credibility or notoriety;
inadequacy of the public/private—or even possibly public/public—partner;
inadequate management or lack of adequate and appropriate local competences;
irrelevant regional supply chain;
inadequacy to framework conditions.

When it comes to regional dynamism, there is abundant evidence suggesting the crucial role of informal and formal networks, whether in terms of clusters contributing to the competitiveness of regional companies, business angels to the development of innovative companies, business clubs to exchanging best practices or business/university interfaces to innovation in regional SMEs.

However, networking is not something that can be pronounced. Indeed, it must stem from a determined process initiated by businesspersons based on the perception of pre-competitive advantages shared by all network members. In this context, the role of public authorities should be limited to facilitating the process and encouraging investment that contributes to increased competitiveness among network member companies.

Networks can only be effective provided that an adequate critical mass is available to them and that they are moderated by a leader recognised by their membership.

Networking using the no-wrong-door concept may be a response to fragmented public provision by promoting stakeholder specialisation.

The availability of a diversity of funding sources is also a key aspect of regional development. Each funding source is essential because it serves the needs either of specific categories of businesses or of all businesses at different stages of their lifecycle. There is little doubt for instance, that micro-credits meet different needs compared to seed capital funds or guarantee schemes.

It is also emerging with increasing clarity that the availability of adequate amounts of equity can only efficiently promote business success provided that steps are taken to improve its absorption, i.e. if support is provided to entrepreneurs to stimulate demand and equity amounts are adequately ensure market flexibility.

In some regions, supply of public equity should go hand in hand with professionalized fund management and the development of partnerships with the private sector.

In an economy whose competitiveness rests on developing and leveraging knowledge, the regional human capital becomes a critical raw material. Talent must be available for invention, design, innovation and entrepreneurship alike.

Regions are often dependent upon serial entrepreneurs and investors with the ability to leverage new market opportunities and share their expertise with the social and economic fabric of the local environment.

Talent also translates into regional leadership. Indeed, the development of every single acknowledged competitiveness cluster enjoyed the support of a leader with a vision. The best known include:

- Silicon Valley: Fred Terman
- Route 128: Vanevar Bush
- Sophia Antipolis: Senator Pierre Lafitte
- Leuven: Martin Hinoul
- Orthopedic surgery cluster in Birmingham, Alabama (USA): Dr James Andrews
- Cardiac devices cluster in Minneapolis–St Paul, Minnesota (USA): Earl Bakken
The importance of a critical mass as a success factor is underscored a number of times above. Below are a few examples of critical mass making the difference between failure and success in economic development policies:

- €400 million: the budget dedicated by METI and MEXT (Japan) in 2005 to their policy in support of the 37 clusters of national interest, as opposed to €280 million over four years for five clusters in Wallonia (B) and €1.5 billion over four years for 65 projects in France!
- $128 million of equity raised from seed capital funds by the three Californian start-ups developing nanotech-based photovoltaic energy technology. For the record, according to EVCA figures, seed capital investment in Europe totalled €148 million invested in 355 enterprises in 2004!
- $185 million invested by venture capital firm OVP Venture Partner in the software cluster leveraging Linux operating system around the University of Portland, Oregon (USA). By comparison, the Leuven Region (B) had €200 million of venture capital available in 2002 through 9 companies.

NB: A counterexample: €18 million were invested in a public incubator in Belgium which was closed only two years after its opening due to a lack of tenants, whereas the "Open Source LINUX" incubator of Portland (USA) only cost $1.2 million to the public authorities, i.e. the State of Oregon and the City of Beaverton.

6.4 Agile public administrations

One would expect public administrations advocating business innovation as a driver of regional development to be able to innovate themselves.

A.T. Kearney consultants studied this issue and identified six features shared by the most effective – i.e. agile – public agencies and services. These features relate to the parameters below:

a. Leadership: defining a clear vision, focusing resources on new trends and strategic objectives and improving flexibility to allocate resources when and where they are needed;

b. The ability to generate and manage organisational change: understanding client needs, improving customer relations and allocating human and financial resources to meet client expectations;

c. eGovernment: take-up and use of NICT applications;

d. Customer service: implementation of CRM (Customer Relationship Management) practices enabling a segmentation of support service provision based on an understanding of customer demands and the development of efficient delivery schemes;

e. Performance evaluations: use of balanced scoreboards and investment in vocational training;

f. Organisational culture and values: mutual and reciprocal trust between and among leaders and employees as well as openness toward both the outside world and in-house creativeness.

Organisational agility is generally hampered by “public market” failures that often take one or more of the following forms:

- dogmatism;
- bureaucratic paralysis;
- absence of proactivity (resistance to change);
- clientelism;
- the NIMBY or “do as I say, not as I do” syndrome;
- announcements not followed by financial resources (investment willingness);
- self-congratulation due to the absence of an evaluation culture;

71 Cf. A.T Kearney, Agile Government: Improving Performance in the Public Sector
• fashion effects without an objective analysis of the strengths and weaknesses of the value chain.

The graph below, adapted from the book of A.G. Lafley and Ram Charan and entitled "The Game Changer", illustrates the elements to be taken into account by an agile public administration when formulating a regional strategy.

Graph 17: Agile public administration and regional strategy

Source: Adaptation of A.G. Lafley's and Ram Charan's graph
CHAPTER 7 REGIONAL INTELLIGENCE

7.1 Definition

Regional intelligence can be defined as an exercise enabling a region to both anticipate socioeconomic change and manage the knowledge derived from such change for the purpose of developing policies, know-how and innovation to eventually become a centre of competence.

In other words, regional intelligence is the regional equivalent of the advantages drawn by the private sector from concepts including economic intelligence, technology watch and transfer as well as RTD activities, with all the consequences this carries in terms of management as well as planning, making and implementing decisions.

7.2 Components of the exercise

The prerequisite for deploying a regional intelligence system is public service mastery of a series of “fundamental” parameters:

- macroeconomic parameters: e.g. the impact of economic globalisation, the comparative advantages of emerging countries, the importance of the international political context on the business climate (oil prices, economic growth, inflation/deflation, etc.);
- mesoeconomic parameters: the formulation of public support services geared toward (i) companies, including in terms of business and talent attraction; (ii) the interface between businesses and key stakeholders; (iii) innovation; and (iv) vocational training;
- microeconomic parameters: the promotion of entrepreneurship and innovation within businesses;
- human capital: availability of talent, observatory of future skills needs, analysis of functions endangered due to offshoring, outsourcing, automatisation and digitalisation;
- society parameters: the impact of the attitude of civil society on the business environment: age pyramid, NIMBY syndrome when it comes to spatial planning or the rejection of scientific progress, environmental issues, the matching of people’s skills with business requirements, immigration, etc.;
- legislative parameters: the impact of legislation on attitudinal change among businesses. Legislation may encourage or hinder innovation and entrepreneurship.

Mastery and management of knowledge relating to the parameters listed above will call for the following from both public authorities and businesses:

- the ability to anticipate and absorb change;
- a capacity for sliding strategic planning;
- the ability to communicate on, and promote awareness of, innovation;
- the ability to operate within formal and informal networks;
- administrative and entrepreneurial flexibility;
- the ability to generate (administrative, product and service, process and business model-related) knowledge and innovation;
- the ability to generate added value over and above the ability to create jobs.

In his book “L’Entreprise réinventée” (Business Reinvented), Marc Halévy-van Keymeulen described (pp. 214-215) the areas businesses need to explore when seeking to develop a corporate vision.

Mr Halévy’s thinking can be extrapolated to any regional strategy without difficulty or loss of substance. Thus, below are the questions that regional intelligence needs to address in order to help public managers develop a suitable regional strategy in light of the present competitive context...

Without any pretence to exhaustiveness, any “good” regional intelligence strategy needs to answer at least the following questions:
• What drivers of external change are most likely to impact the functioning of the regional economy within the next five to ten years? Conversely, which of its components are most likely to remain unchanged? These questions need to be asked especially in areas including technology, political ground swells and natural resources as well as population, cultural and sociological trends.

• What are the likely weight and milestones of the influence of these drivers on the pathways of my region’s economy? In light of those, what should be my priorities?

• To what extent are my region’s entrepreneurial dynamic and regional policy at one with these drivers? (This is the crucial test for any strategy’s survivability).

• What will be the impact of these drivers in terms of threats and opportunities for my region?

• Alongside the existing regional vision, there still remains another issue: What of my strengths (which I need to leverage as a matter of priority) and weaknesses (which I need to address or outsource as a matter of priority) against these drivers.

The main challenge will be to identify lasting tendencies in the mass of available data and knowledge and tell it apart from non-information and passing trends. It is in this context that regional intelligence can make an important contribution when it comes top developing and reviewing regional strategies.

7.3 Objectifs

Face à la complexité des composantes de la dynamique économique, tant globale que régionale, il est de plus en plus nécessaire de développer des systèmes d'intelligence territoriale. Ces systèmes ont pour vocation de comprendre l'évolution des avantages concurrentiels du territoire, de ceux des territoires voisins ainsi que des territoires acteurs dans un monde globalisé et des entreprises qui y sont établies. Ceci suppose la compréhension des facteurs sectoriels et du fonctionnement des réseaux d'excellence (technologiques, financiers, connaissances, marchés, clusters, talents, …) en vue d'anticiper les mutations et préparer des alliances transnationales.

Selon certains experts français72, les objectifs de l'intelligence territoriale doivent permettre :

• de développer des projets créateurs de valeur ajoutée,
• d'anticiper les mutations tant de technologie que de marché ou de savoir-faire,
• de promouvoir l'attractivité du territoire,
• d'animer les réseaux formels et informels économiques et sociaux,
• de mettre en place des systèmes de veille économique thématique et sectorielle,
• de développer des systèmes d'information territoriale et de leur exploitation par le plus grand nombre possible de PME.

Les résultats de ce type d'exercice permettront :

• d'actualiser de manière permanente le diagnostic des forces et faiblesses ainsi que des chaînes de valeur du territoire,
• de mettre en place des services de soutien aux différents réseaux locaux, nationaux et transnationaux,
• de renforcer la gouvernance,
• de dynamiser la compétitivité,
• d'éliminer les asymétries entre les politiques publiques et les attentes du secteur privé, y compris en termes de sécurité économique, c'est-à-dire une assistance dans l'anticipation des mutations et des effets de la globalisation.

Pour notre part, nous préconisons un système qui vise aussi à comprendre le système territorial de création, de transfert, d'utilisation et d’absorption de connaissances.

7.4 Intelligence territoriale et société de la connaissance

A travers ce système, les pouvoirs publics auront une vue sur la manière dont les acteurs régionaux créent des connaissances (idées originales, nouveautés liées à la résolution de problèmes identifiés par le tissu socio-économique local), les transfèrent et les diffusent vers les acteurs locaux ou à

72 Dont Philippe Clerc, Président de l'Association française pour le développement de l'intelligence territoriale
l'extérieur du territoire, les importent dans la région, les utilisent sous forme d'innovation ou les absorbent sous forme de biens publics au profit de l'ensemble des acteurs locaux.

Ceci supposera les actions suivantes :
- procéder au repérage des détenteurs de connaissances
- créer un réseau de partage des connaissances
- recueillir, acquérir, trier, analyser, valider les connaissances
- partager, valoriser et exploiter les connaissances
- comprendre les processus de blocage à la diffusion et à l'utilisation généralisée des connaissances
- éliminer les asymétries d’information entre acteurs-clés
- identifier et tirer parti du rôle spécifique de ces acteurs-clés.

Ceci est reflété dans le tableau ci-après qui présente un référentiel pour une action d'intelligence régionale.

**Tableau 13 Référentiel d'intelligence territoriale**

<table>
<thead>
<tr>
<th>Processus</th>
<th>Acteurs</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Création de</td>
<td>Administration publique</td>
<td>Investissements en faveur de :</td>
</tr>
<tr>
<td>connaissance</td>
<td></td>
<td>• RDTI Co-recherche</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Co-développement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ingénierie financière</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mise en réseau</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Intelligence technologique et de marché</td>
</tr>
<tr>
<td></td>
<td>Institutions d'enseignement</td>
<td>Implication dans l'animation du tissu socio-économique, la mise à disposition de talent et la vulgarisation des connaissances ainsi que la résolution des problèmes des secteurs-clés pour la région</td>
</tr>
<tr>
<td></td>
<td>Entreprises</td>
<td>Dépenses en RDTI, à l'international en formation continue et en recrutement de talent</td>
</tr>
<tr>
<td></td>
<td>Clusters</td>
<td>Représentativité et efforts d'intelligence technologique et économique. Degré d'internationalisation</td>
</tr>
<tr>
<td>Transfert</td>
<td>Université / Centre de Recherche</td>
<td>Partenariats, Spin-offs, Spin-outs, Octroi de licences, Proof of concept</td>
</tr>
<tr>
<td></td>
<td>Entreprises /</td>
<td>Transfert technologique (import-export)</td>
</tr>
<tr>
<td></td>
<td>Entreprises</td>
<td>Mise sur le marché de nouveaux produits et services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intégration de nouvelles technologies dans les secteurs traditionnels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Création de nouvelles entreprises</td>
</tr>
<tr>
<td>Utilisation</td>
<td>Investisseurs</td>
<td>Capital d'amorçage</td>
</tr>
<tr>
<td>Absorption</td>
<td>Acteurs-clés</td>
<td>Dissémination d'idées et de connaissances</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Création de nouveaux marchés</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Détection et formulation de nouveaux besoins</td>
</tr>
</tbody>
</table>

Source : EURADA
En bâtissant localement un tel référentiel, on prendra en compte le fait qu’actuellement les territoires ne disposent réellement que des cinq moteurs de croissance suivants :

- le capital talent (la créativité)
- l’innovation (si l’on ne peut plus imiter, il faut savoir innover)
- la destruction créatrice d’activités ou d’entreprises (les capitaux publics sont limités; dès lors, le soutien aux canards boiteux se fait toujours au détriment de l’innovation)
- le capital risque (principalement la validation, l’amorçage et le démarrage).

Une attention particulière sera accordée à la vitesse relative du changement qui s’opère dans chaque secteur d’activité ou dans les maillons de la chaîne de valeur, de la disponibilité des différentes qualifications, des gains potentiels de productivité et de la qualité des interfaces entre acteurs-clés.

Il peut être également intéressant de réaliser une étude SWOT de la chaîne de valeur régionale qui chemine de la création à l’absorption de connaissances et qui comprend les maillons suivants :

<table>
<thead>
<tr>
<th>Création</th>
<th>Transfert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diffusion</td>
<td>Absorption</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Création</th>
<th>Transfert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Imitation</td>
</tr>
<tr>
<td>Formation initiale</td>
<td>Amélioration des produits et process</td>
</tr>
<tr>
<td>Créativité</td>
<td>Innovation</td>
</tr>
<tr>
<td>Enseignement universitaire</td>
<td>Acquisition propriété intellectuelle</td>
</tr>
<tr>
<td>Formation continue</td>
<td>Transfert technologique</td>
</tr>
<tr>
<td>Recherche appliquée</td>
<td>Mise sur le marché de produits/services</td>
</tr>
<tr>
<td>Validation du concept</td>
<td>révolutionnaires</td>
</tr>
<tr>
<td>Recherche fondamentale</td>
<td></td>
</tr>
<tr>
<td>Publication, vulgarisation, protection intellectuelle</td>
<td></td>
</tr>
<tr>
<td>Commercialisation des résultats</td>
<td></td>
</tr>
</tbody>
</table>

En fonction des résultats de cette analyse, les décisions adéquates seront prises pour renforcer les capacités régionales de production de connaissances ou fluidifier les échanges et transfert entre acteurs, qu’ils soient locaux ou étrangers.

Le développement de systèmes d'intelligence territoriale peut également contribuer à une rupture de la culture d'intervention publique classique fondée sur l'obligation de moyens en la faisant évoluer vers une culture de résultats !

7.5 **Consequences for public managers**

At regional level, all change can be a source of decline or growth. The regional impact of change will depend on public and private decision-makers’ attitudes and aptitudes.

**Potential attitudes are:**

- “laisser-faire”, endure and react, V.
- analyse, anticipate and proact.

**Existing aptitudes (capacity) are:**

- limited to acquired skills and by inflexible procedures, V.
- enhanced by constant learning and experimenting.

The table below seeks to introduce the risks and opportunities for regions represented by "fundamental parameters" presented under section 7.2.
Table 13  Risks and opportunities for regions represented by "fundamental parameters"

<table>
<thead>
<tr>
<th>Fundamental parameters</th>
<th>Potential positive attitudes</th>
<th>Capacity for constant adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export growth</td>
<td>Improved SME awareness</td>
<td>Specific support (Fit for Export)</td>
</tr>
<tr>
<td>Business relocations</td>
<td>Market segmentation (FDI) Retention schemes Awareness campaigns on the added value and development of intellectual assets in local businesses</td>
<td>Refining target group selection Discussing with business managers Regional strategy to promote innovation, IP (intellectual property) and quality Leveraging businesses' intangible assets (brands, designs, customers, know-how, innovation, etc.)</td>
</tr>
<tr>
<td>Volatility of energy prices in light of political context</td>
<td>Analysis of the regional dependence on oil as an energy source</td>
<td>Energy savings and renewable energy programmes</td>
</tr>
<tr>
<td>Improved competitiveness in the regions of emerging countries</td>
<td>Transnational cooperation</td>
<td>Support for clusters' internationalisation</td>
</tr>
<tr>
<td>Population ageing</td>
<td>Analysis of public support opportunities and needs</td>
<td>&quot;Wellness&quot; or &quot;ergonomic design&quot; clusters</td>
</tr>
<tr>
<td>Innovation and new technologies</td>
<td>Analysis of local needs and potential Sectorial technological watch</td>
<td>Strategies to mainstream new technologies into product development in traditional industries</td>
</tr>
<tr>
<td>Increased importance of NTIC</td>
<td>Analysis of potential new applications</td>
<td>Training Creation of new markets</td>
</tr>
</tbody>
</table>

A titre d'exemple intéressant d'exercice d'intelligence régionale mené par une membre d'Eurada, on mentionnera l'action de Limousin Expansion (F)73 en matière de web design qui combine l'organisation d'un festival du web design (absorption de connaissances), complété d'un concours de web design international (création et transfert de connaissance), avec une formation universitaire unique en France de web pro (création/ transfert de connaissance) et l'accueil d'entreprises en phase de création ou des start-ups dans un incubateur (exploitation de connaissances).

### 7.6 Intelligence territoriale et croissance des PME

Les quatre caractéristiques communes des PME à forte croissance appelées gazelles sont :

- leur position de leader sur leur marché mondial,
- l'équilibre de leurs sources de financement (capitaux propres, capitaux à risque, dettes financières, capacité d'autofinancement),
- l'excellence de leur équipe dirigeante et la qualité de leur personnel,
- la valeur de leur capital immatériel (brevets, marque, capacité en RDTI).

Les collectivités territoriales peuvent développer des services à forte valeur ajoutée apportant des réponses à ce type de besoins en aidant les PME à fort potentiel de croissance à acquérir ou en leur offrant des services d'intelligence sur les marchés (clients, fournisseurs, concurrents) et l'accès à des infrastructures de RDTI, de capital risque et des réseaux de contact locaux (peer, universités, mentors, etc) ou internationaux.

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73 Cf. www.limousin-expansion.fr
Le développement d'une telle approche se justifie par le fait qu'en général, un petit nombre d'entreprises régionales (3 à 5% du total des PME régionales) sont responsables d'une grande majorité des emplois locaux.

7.7 Les ingrédients d'un outil d'intelligence régionale

Nous suggérons pour chaque secteur économique important d'un territoire la création d'une base de données interactive et actualisée en permanence abordant les questions critiques suivantes pour les entreprises. Les informations seront recueillies au niveau régional, national et international.

- **Marchés**: volumes, niches, faiseurs de marché, tendances globales, concentration géographique d'opérateurs, berceaux de création de nouvelles entreprises et de connaissances, ...
- **Capital humain**: tendances en besoins d'emplois et de qualifications, offre d'éducation et de formation professionnelle continue, localisation, attraction et rétention de talents, impact des possibilités d'outsourcing, de digitalisation et d'automatisation des fonctions.
- **Capital social**: clusters, clubs d'entreprises, autres réseaux formels et informels, rôle des peers et mentors, types d'interfaces pertinentes dans le secteur.
- **Capital financier**: aversion aux risques des différents investisseurs pour le secteur, disponibilité des différentes sources, éléments-clés des études de "due diligence" des opérateurs financiers, ...
- **Connaissances**: capacités de RDT, écosystème d'innovation, qualité des services de consultation et des interfaces universités-entreprises, propriété intellectuelle, temps d'accès au marché, ...
- **Infrastructures**: qualité et pertinence des infrastructures de base et entrepreneuriales.
- **Empreintes écologiques du secteur**: contribution au débat sur le changement climatique.
- **Tendances en matière d'intégration et de convergence technologiques** ainsi que de modélisation et de stimulation.

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74 Cf. Travaux de David Birch – MIT sur les gazelles.
L’ÉVALUATION NE DOIT PLUS ÊTRE UN SUJET TABOU !

INTRODUCTION

Beaucoup trop d’experts et de politiciens estiment encore que les stratégies de développement régional consistent à mettre en place des moyens sans nécessairement rechercher à atteindre des résultats prédéfinis. Ceci est le reflet d’une culture de moyens et non d’une culture de résultats, ou encore une approche par l’offre et non par la demande, ce qui ne favorise pas le développement de méthodes d’évaluation.

Ce type de culture explique sans nul doute le foisonnement d’initiatives régionales dictées plus par des considérations de prestige ou des effets de mode que par une réelle analyse des capacités territoriales à tirer parti du dispositif, par la maîtrise de la chaine de valeur et par la disponibilité des financements publics et privés indispensables à une bonne mise en œuvre des dispositifs. Combien d’incubateurs, de parcs technologiques et de clusters émergent-ils de la catégorie de "voeux pieux de politiciens" plutôt que de la catégorie de "centres d’excellence" et du faire savoir plutôt que d’un réel savoir-faire ?

L’exercice d’évaluation des politiques publiques en faveur du développement est handicapé par la difficulté d’identifier qui en sont les réels clients. Si la logique voudrait que ceux-ci soient les entreprises ou les entrepreneurs, il apparaît en pratique que ce sont les élus, c’est-à-dire les bailleurs de fonds et non les bénéficiaires finaux.

Combien de structures intermédiaires telles que les ARD ont-elles été décapitées, restructurées voire fermées, non pas à cause de leurs performances, mais pour des raisons dites "du fait du prince" , soit dogmatique (Royaume-Uni du temps de Madame Thatcher), soit politiciennes (France, Europe centrale). Dans le même temps, combien de structures intermédiaires ont-elles vu le jour pour satisfaire des egos ou parachuter des proches du pouvoir politique sans apporter une réelle plus-value dans le paysage des structures intermédiaires ? De plus, la vision à court terme et l’émotion dans le cas de délocalisations ne favorisent pas une évaluation objective des bénéfices tirés à moyen ou à long terme des politiques régionales ou de leurs instruments.

Il faut également constater que l’évaluation de politiques publiques est rendue difficile par l’appréciation des surcoûts dus à la prise en compte de l’intérêt publics ainsi que par l’absence de marché solvable pour un certain nombre de prestations ou par le caractère anticyclique de certaines interventions.

La contractualisation des missions de développement économique en lieu et place de l’octroi d’une dotation budgétaire votée annuellement favorisera la définition de paramètres de plus en plus objectifs d’évaluation des prestations des intervenants et des interventions dans les chaînes de valeur régionales de la stimulation de l’entrepreneuriat et de l’innovation.

On trouvera ci-après des réflexions sur des méthodes d’évaluation qualitative et quantitative des outils et des politiques de développement régional.
CHAPITRE 1 REFERENTIEL DE VALEUR AJOUTEE ET D’INTENSITE DES PRESTATIONS DE SERVICES DE SOUTIEN AUX ENTREPRISES

Le tableau ci-après tente de présenter une hiérarchie des services de soutien en fonction :
- a) de la valeur ajoutée du service pour l’entreprise,
- b) de l'intensité des efforts à fournir et des compétences professionnelles à acquérir par la structure qui offre le service de soutien.

L'échelle de l'intensité des efforts à fournir varie de 1 à 6. L'intensité 1 correspond à une faible degré de sophistication, l'intensité 3 à un degré moyen et l'intensité 6 à une degré élevé.

Les barreaux de cette échelle sont les actions de :

<table>
<thead>
<tr>
<th>Nombre de clients potentiels</th>
<th>Intensité en valeur ajoutée</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information</td>
<td>Elevé</td>
</tr>
<tr>
<td>2. Sensibilisation</td>
<td>Faible</td>
</tr>
<tr>
<td>3. Animation</td>
<td></td>
</tr>
<tr>
<td>4. Hébergement</td>
<td></td>
</tr>
<tr>
<td>5. Mise en relation / interfaces</td>
<td></td>
</tr>
<tr>
<td>6. Diagnostic</td>
<td></td>
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<td>7. Intelligence</td>
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<td>8. Conseils</td>
<td></td>
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<td>9. Formation</td>
<td></td>
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<tr>
<td>10. Partenariat</td>
<td></td>
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<tr>
<td>11. Transfert et brockrage</td>
<td>Faible</td>
</tr>
<tr>
<td>12. Ingénierie financière</td>
<td>Elevée</td>
</tr>
</tbody>
</table>

Source : EURADA

L'échelle de valeur prend la forme d’une pyramide inversée où la base est large puisque constituée par des services génériques à l'intention d'un grand nombre d'utilisateurs potentiels (entreprises et entrepreneurs potentiels) et le sommet étroit, dans la mesure où les services de soutien proposés sont sophistiqués et destinés à quelques entreprises ayant des besoins spécifiques hautement spécialisés et intensifs en main d'œuvre. Cette forme de "pyramide inversée" est également remarquable en ce qui concerne le nombre d'intervenants (des centaines au niveau d'un pays) dans le domaine de l'information, contre quelques uns dans le domaine de l'ingénierie financière.

Comme déjà souligné dans la première partie, il existe une pléthore d'acteurs pour les services à faible intensité de compétences (≤ 3), qui peuvent être assimilés à une offre universelle, et une pénurie d'acteurs pour les services à forte intensité.

Le Tableau 14 présentant une hiérarchie des services de soutien est complété par le Graphique 18 présentant une chaîne de valeur complète des services de soutien.
<table>
<thead>
<tr>
<th>Tableau 14</th>
<th>Hiérarchie des services de soutien</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Informations</td>
<td>Informations génériques (touch and go)</td>
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<td></td>
<td>Informations spécifiques</td>
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<tr>
<td></td>
<td>Gestion de bases de données (aides, législation)</td>
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<td></td>
<td>Informations ciblées</td>
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<tr>
<td></td>
<td>Business plan (formulation)</td>
</tr>
<tr>
<td>2. Sensibilisation</td>
<td>Actions génériques</td>
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<tr>
<td></td>
<td>Journée, semaine, porte ouverte</td>
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<td></td>
<td>Actions spécifiques</td>
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<td></td>
<td>Concours de business plan</td>
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<td></td>
<td>Salon de l'entreprise</td>
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<tr>
<td>3. Animation</td>
<td>One-stopshop (création d'entreprise)</td>
</tr>
<tr>
<td></td>
<td>Base de données d'opportunités économiques</td>
</tr>
<tr>
<td></td>
<td>Club d'entreprises (users groups)</td>
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<tr>
<td></td>
<td>Base d'opportunités technologiques</td>
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<tr>
<td></td>
<td>Incubateurs</td>
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<td></td>
<td>Centre technique sectoriel</td>
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<td></td>
<td>No wrong door (mise en œuvre du concept)</td>
</tr>
<tr>
<td></td>
<td>Clubs et réseaux de business angels</td>
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<tr>
<td></td>
<td>Technopôles</td>
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<tr>
<td>4. Hébergement</td>
<td>Parcs industriels</td>
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<tr>
<td></td>
<td>Incubateurs et pépinières (location espace)</td>
</tr>
<tr>
<td></td>
<td>Hôtels d'entreprises</td>
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<tr>
<td></td>
<td>Parcs technologiques</td>
</tr>
<tr>
<td>5. Mise en relation</td>
<td>Echanges informatisés de profils</td>
</tr>
<tr>
<td></td>
<td>Participation groupée à des foires</td>
</tr>
<tr>
<td></td>
<td>Echanges informatisés de profils technologiques</td>
</tr>
<tr>
<td></td>
<td>Echanges bilatéraux (ou bilatéraux) d'opportunités d'affaires</td>
</tr>
<tr>
<td></td>
<td>IBEX (salon inversé)</td>
</tr>
<tr>
<td>6. Diagnostic</td>
<td>Validation d'un business plan</td>
</tr>
<tr>
<td></td>
<td>Analyse des forces et faiblesses</td>
</tr>
<tr>
<td></td>
<td>Benchmark</td>
</tr>
<tr>
<td></td>
<td>Audit des besoins et des potentialités dormantes</td>
</tr>
</tbody>
</table>
7. Intelligence
Commerciale
Valorisation de la propriété intellectuelle
Veille technologique
Proof of concept

8. Conseils
En management
A l'internationalisation
A la reprise / transmission d'entreprise
Offre de coach ou de mentor
Innovation (produits et business model)
En design et qualité
Mise à disposition d'étudiants et professeurs d'université
A l'innovation (process et breakthrough technology)

9. Formation
Management
Internationalisation
Innovation
Transfert technologique
Valorisation de la propriété intellectuelle
Investment readiness

10. Partenariat & brockage
Commercial
Evénements face-à-face
Universités-Entreprises
Technologique
Financier
Chèques innovation
Joint venture

11. Transfert
Technologique (licences, brevets)
Exploitation commerciale des résultats de RDTI
D'entreprises (reprise / cession)

12. Ingénierie financière
Subventions
Micro-crédits
Garanties
Prêts d'honneur
Avances remboursables pour projets innovants
Cofinancement de projets de RDTI appliqué
Fonds de venture capital
Fonds de co-investissement
appuyant les business angels
Mezzanine

Source : EURADA
Fonds d'amorçage
Graphique 18  Chaîne de valeur des services de soutien

**Préconditions**

- Reconnaissance institutionnelle
- Légitimité
- Compétence du personnel
- Capacité à comprendre la demande des entreprises
- Evaluer en permanence l'efficience des services et l'efficacité des intervenants

<table>
<thead>
<tr>
<th>Information</th>
<th>Sensibilisation</th>
<th>Animation</th>
<th>Hébergement</th>
<th>Mise en relation</th>
<th>Diagnostics</th>
<th>Intelligence</th>
<th>Conseils</th>
<th>Formation</th>
<th>Partenariat et brokage</th>
<th>Transfert</th>
<th>Ingénierie financière</th>
</tr>
</thead>
<tbody>
<tr>
<td>Générale</td>
<td>Ad-hoc</td>
<td>Base de données</td>
<td>Parcs industriels</td>
<td>Business plan</td>
<td>Marché Technologique</td>
<td>Management Innovation</td>
<td>Commercial Financier</td>
<td>Technologique</td>
<td>Subsides</td>
<td></td>
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<tr>
<td>Spécifique</td>
<td></td>
<td>Clubs</td>
<td>Incubateurs</td>
<td>Audits Benchmarking</td>
<td>Technologique</td>
<td>Transfert technologique</td>
<td>Technologique</td>
<td>Entreprise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ciblée</td>
<td>Evénement Concours</td>
<td>Réseaux</td>
<td>Parcs technologiques</td>
<td></td>
<td></td>
<td>Reprise / transmission Innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touch &amp; Go</td>
<td></td>
<td>No-wrong-door</td>
<td>Hôtels d'entreprises</td>
<td></td>
<td></td>
<td>Innovation</td>
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<td></td>
<td></td>
<td>Infrastructure</td>
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</tbody>
</table>

**Méthode de mise en œuvre**

- No-wrong-door
- Package de services financiers et non financiers
- Animation de réseaux

Source : EURADA
Ce référentiel permet l'analyse des chaînes de valeur présentées dans les chapitres précédents. Il permet également aux pouvoirs publics d'évaluer et de reformuler leur offre de services de soutien. En parallèle, ils doivent aussi repenser les moyens octroyés aux différents prestataires de services. Il va de soi que les organismes offrant des services à forte valeur ajoutée supportent des coûts de transaction (analyse, validation des procédures, prise de risque, ...), de personnel et de moyens (technique, formation, ...) plus élevés que ceux se limitant à offrir des services d'information ou de sensibilisation, et méritent donc des interventions financières plus élevées.

Si ce constat sonne comme une évidence ou paraît relever du bon sens, on notera que dans la pratique, cette règle n'est pas toujours respectée. C'est ainsi qu'au cours des quinze dernières années par exemple, la Commission européenne a dépensé des millions d'Euros pour soutenir le réseau des EIC (centres d'information) sur la base du principe du "faire savoir", contre à peine 250.000 Euros pour soutenir la création de réseaux de business angels. De plus, aucun financement ad-hoc n'a été dégagé pour des programmes d'Investment Readiness ou de Proof of Concept, des domaines où l'Europe a un croissant besoin de modélisation et d'expertise, donc de "savoir-faire". Ce reproche peut être adressé à tous les États membres de l'Union européenne, sauf au Royaume-Uni et à l'Irlande, et à leurs régions. Ceci illustre qu'il existe encore trop souvent une grande asymétrie entre le diagnostic, les effets d'annonce et l'"Investment Willingness" d'un grand nombre d'acteurs publics en matière de reconnaissance de la valeur ajoutée de leurs interventions.

Ce type d'évaluation de la qualité des prestations des organismes intermédiaires actifs dans le secteur des services de soutien aux entreprises et à l'innovation doit permettre in fine de prendre la mesure des efforts à fournir en vue d'accroître la valeur ajoutée de l'offre de services et des investissements en capital humain requis en la matière. Dans certains cas, les résultats de cette approche doivent conduire à des actions de rationalisation d'une ou de plusieurs parties de la chaîne de valeur et au renforcement des partenariats entre les acteurs des différents maillons de cette chaîne (cf. concepts de no-wrong-door et de one advisory stop shop ou de sign posting system). Les bienfaits du principe de destruction créative cher à Schumpeter peuvent aussi s'appliquer au secteur public ! L'exercice d'évaluation prendra également en compte la qualité des partenariats et des interfaces développées entre les entreprises et les autres acteurs-clés de la région (détenteurs de capital: finance, connaissance, ...) réalisées à chaque maillon de la chaîne par chaque intervenant.

Les pouvoirs publics peuvent ainsi analyser la proposition globale de services de soutien sur leur territoire et la proposition individuelle de chaque intervenant. La proposition prend en compte le spectre de services, sa qualité et son intensité en valeur ajoutée. Les doublons seront éliminés et les maillons manquants ou faibles dotés de moyens financiers et humains permettant de combler les lacunes.
CHAPTER 2 EVALUATION OF INTERVENTION IN THE FIELD OF REGIONAL DEVELOPMENT

Traditionally, RDA activity or public intervention in the field of regional development is only evaluated against the number of jobs created or retained.

The (predictable) changes caused both by economic globalisation and the quest for competitiveness gains should encourage public managers and funding parties to identify other parameters than simply jobs to measure the impact of their action. Such parameters would be better suited to the challenges of endogenous development over the next five to ten years.

Below are some suggested parameters for consideration in this new context:

- return on investment;
- “opportunity cost”
- “value for money”,
- value added;
- customer satisfaction;
- measuring the gap between objectives and outcomes;
- leveraging private investment
- contribution to changing the regional socioeconomic fabric
- sustainable development.

Some tools are to be considered as ex ante ones and some ex post. It should be stressed that the main role of RDAs is to change or improve the framework conditions in which the socioeconomic fabric of a region is operating. This means to look how interventions are encompassing political goals such as entrepreneurship, innovation, R&D exploitation, job creation etc...

2.1 Return on Investment

Public money is spent from budgets fed by direct and indirect taxes.

In the same way as business performance is measured by its return on investment, it would be judicious to evaluate the effectiveness of public sector intervention in support of the economy in terms of the tax revenue it generates (accroissement des recettes fiscales telles que TVA, impôts sur le revenu, ...). Dans certains cas, il peut être intéressant de mesurer l'accroissement du salaire moyen régional permis par l'intervention. Such an analysis could be performed at the level of both strategic programmes and individual measures.

The return on investment concept can also be applied to measure the number of jobs supported as well as the growth created in the regional economy.

With regard to the growth created in the regional economy, RDAs can undertake an analysis based on the balance sheet of enterprises which got their support. RDAs can compare performance trends of a sample of enterprises supported and not supported. Both IGRETEC (B) and ALMI Företagspartner (S) found out that enterprises having been supported present better balance sheets than the others. Of course, all the growth cannot be claimed by RDAs, but at least a contribution for such better competitiveness situation can be awarded to the services provided by the RDAs.

2.2 Opportunity Cost

Opportunity cost is a concept that covers the double notion of acting V. abstaining and choosing one method of action rather than another.

Evaluating RDA action in light of this concept asks the following questions:
Is action always validated based on potential recipients’ actual—as opposed to supposed—needs?

Do beneficiaries perceive the actual advantages of proposed action or are they simply leveraging an opportunity?

Is RDA intervention strategic or opportunistic?

Is the cost of intervention commensurate with expected positive outcomes (i.e. does it address a market failure, improve awareness of some innovative concept, meet solvency needs on a specific market segment, etc.)?

Could the cost of intervention be reduced via alliances with other partners (economies of scale) or through subcontracting or merger with other existing measures? Does intervention replicate—or overlap with—others existing measures?

Are grants legitimate? Would it not be useful—from the point of view of public spending—to consider other alternative forms of intervention including (soft) loans or even repayable advances?

An analysis of answers to these questions may yield financial flows that may in turn generate a tax ROI or enable the determination of expected value for money.

2.3 Value for Money

Using the concept of “value for money” requires a thorough examination of the comparative advantages of the different existing forms of intervention:

- grants, loans, guarantees, interest rate subsidies;
- subsidy rates;
- shared vs. tailored services;
- cost per job created by an SME supported by a subsidy vs. FDI;
- direct intervention vs. outsourcing.

RDAs should be able to demonstrate which projects or programmes bring good value for money in matching the demand of their shareholders.

For instance, this approach should help answer the question "Is it better to give grants to universities to develop schemes in favour of SMEs or to provide money to SMEs to buy services from universities?"

2.4 Value Added

Based on the argument that in every country these days, regional competitiveness rests on:

- innovation;
- talent and quality in human resources;
- cooperative networks;
- proof of concept and awareness of methodologies that are inadequately disseminated at regional level;
- attraction of private investment;
- the regional contribution to the eradication of market failures;

the effectiveness of intervention can be measured in terms of financial value added. It is useful to consider and quantify benefits in terms of capacity building in areas including collective learning, social integration as well as environmental protection and the preservation of endogenous resources. For the sake of congruence, there is a corresponding need to deduct from this financial value added the costs incurred due to resistance to change among key stakeholders (amount of aid paid to ailing companies) and to delays inherent to the decision-making process.

The contribution of a programme to the competitiveness and the profitability of the local economy can be measured by the added value created. Often this parameter is related to the
incentives provided for local infrastructure, firm productive investments and innovation. From a regional point of view, trends year after year are the most significant data to draw lessons.

2.5 Customer satisfaction

Any form of public spending to foster economic activity should be followed by a customer satisfaction survey. In order to be objective, such a survey should be divided into two parts: one on recipient satisfaction, distinguishing between occasional and loyal users and another one of potential recipients who did not access support. This second part is essential in the sense that, while beneficiaries of public subsidies can reasonably be expected to express general satisfaction with the public support they have received, understanding the reasons why other potential beneficiaries did not leverage available support is more revealing.

Indeed, even when recipients are not pleased with public services, very few of them dare openly express dissatisfaction because they are anxious about possible retaliation. Evidence of this can for instance be found in the disastrous management of some European Commission programmes (late payments, audits and more audits—sometimes leading to arbitrary or dogmatic conclusions being drawn—, lack of adequate means to achieve expected outcomes, publication of calls for proposals at preposterous times of year—31 December or in August—, excessively lengthy decision-making processes, etc.) without anyone ever daring to either file a formal complaint with DG Competition on grounds of abuse of dominant position or publishing an objective memorandum exposing donor failures and voicing customer frustrations. And it can reasonably be inferred that the same attitude predominates at all other administrative levels (national, regional, local).

Evaluating customer satisfaction should also enable comparative analyses to be conducted on delivery mechanisms (calls for tenders, direct management, etc.) as well as on the nature of support: subsidies V. loans with or without counselling and/or support measures complementing finance.

2.6 Measuring the gap between objectives and outcomes

In any organisation these days, modern management requires setting both annual strategic objectives and specific targets either for centres of competence or for individuals.

Therefore, it is possible to evaluate RDA performance by measuring the gap between objectives and outcomes, as well as resulting gains or extra costs.

It is worth noting in this respect that French RDA managers under the umbrella of UCAR, have investigated the possibility of granting incentive bonuses to the executive staff of RDAs in proportion of performance against predetermined objectives. This work illustrates the relevance of the evaluative approach.

2.7 Leveraging private investment

In the face of diminishing public budgets and increasingly scattered public intervention, the latter's effectiveness should be measured in terms of its ability to leverage private investment. RDAs can play an important role as private investment accelerator including with universities and research centres.

This method could be implemented at different levels including:

(i) RDA budget or individual cost centres;
(ii) Individual strategic programmes;
(iii) Individual measures;
(iv) Individual public-private partnerships.

The effectiveness of intervention could also be measured on the basis of the multiplying effect of initial public investment.
2.8 Contribution to changing the regional socioeconomic fabric

The European regions will no longer be competitive if they do no support the conversion of their territories. Therefore, the public policies will have to measure the way this change is supported rather than count the number of jobs lost in traditional sectors.

With a view to measure this change, the data to be collected might be as follows:

- amount of investment in research and innovation infrastructures
- support to be given to enterprises in order to introduce new products and services on the market
- number of enterprises assisted in order to access RTD or technology transfer fundings
- number of jobs created in new activities
- assessment of the means how enterprises are involved in policy implementation.

RDAs and other public sector bodies have to detect new needs and provide new services and activities in order to respond to those new needs.

2.9 Sustainable development

Another assessment criterion might be the contribution to sustainable development. The following criteria to be taken into account in this case are:

- Quality of jobs created
- Rational use of energy and natural resources
- Environmental constraints
- New activities (eco-innovation)
- Equal opportunities (education, training, professional reinsertion)
- Increased average regional wages.
3.1 Les outils du secteur privé

L'évaluation n'est pas une fin en soi; elle doit conduire à un système continu d'amélioration de la formulation des stratégies régionales, de leur contenu, de leur valeur ajoutée et de leur mise en œuvre. Le secteur privé s'inspire actuellement de trois techniques pour poursuivre cet objectif, à savoir le benchmarking, le Six Sigma et le Lean. Ces méthodes ont été développées respectivement par Xerox (benchmarking), Motorolla et GE (Six Sigma) et Toyota (Lean). Même si ces méthodes ne peuvent être "copiées-collées" par le secteur public, un certain nombre d'idées et de principes peuvent aider les acteurs publics à se lancer dans un exercice continu d'amélioration de leurs pratiques.

Le benchmarking peut être défini comme un processus continu de recherche, d'analyse comparative, d'adaptation des pratiques d'une entreprise pour tendre à l'excellence tout au long de sa chaîne de valeur. Tout exercice de benchmarking implique cinq actions :

- choisir les partenaires
- collecter des données pertinentes
- analyser celles-ci
- interpréter les résultats de l'analyse
- avoir la volonté et la capacité d'adopter les procédés identifiés comme les meilleurs.

Le concept de Six Sigma peut quant à lui être défini comme une méthodologie structurée visant à une amélioration permanente de la qualité et de l'efficacité des processus de production et de mise sur le marché de produits ou de services. Il se fonde sur la maîtrise des cinq paramètres suivants :

- la maîtrise des attentes des clients,
- la mesure des performances,
- l'analyse et la cartographie des processus de production,
- l'amélioration et l'innovation des processus,
- le contrôle de l'impact des modifications sur les performances.

Quant au concept de LEAN, il peut être défini comme une méthodologie visant la recherche de la performance par le biais de l'élimination des défauts. Il suppose la maîtrise des trois paramètres suivants :

- la maîtrise du schéma de production. Celle-ci doit être fonction de la demande et non des capacités locales de production et exige des partenariats étroits avec les fournisseurs car ils doivent adopter les mêmes exigences de qualité;
- une attitude managériale attentive à l'amélioration continue de la qualité, à l'innovation, ou encore au contact avec le terrain et à la recherche du consensus;
- une stratégie à long terme tournée vers l'excellence et la vision que la valeur ajoutée est définie par le client qui doit être servi en flux tendu.

3.2 Transposition de ces concepts au secteur public

Les défis de la transposition de ces méthodes de management dans le secteur du développement régional sont de quatre ordres, à savoir :

- l'environnement culturel, administratif, financier et fiscal des régions qui, par essence, ne peut être aisément copié ni transféré;
- la difficulté de faire la démonstration du lien entre un projet et son effet sur le développement régional;
- la résistance au changement;
- la longueur du cycle de vie d'une stratégie.

Les concepts de Six Sigma et de LEAN peuvent certainement inspirer de nouvelles attitudes aux acteurs publics, notamment :

- en accordant une plus grande attention aux aspirations et aux besoins des bénéficiaires finaux des interventions publiques,
en maîtrisant les différentes chaînes de valeur du développement économique,
en renforçant des partenariat tout au long des chaînes de valeur,
en raccourcissant les cycles de prise de décision,
en mesurant l'efficacité et l'efficience des procédures et des prestataires de services,
en remettant constamment en question les procédures afin de les adapter aux meilleures pratiques,
en forçant le changement en y consacrant les moyens humains et financiers adéquats,
en incluant une dimension internationale à toutes les actions mises en place.

Le contexte économique général actuel, caractérisé par la compétition globale, de même que l'importance accrue de la connaissance et la contraction des budgets publics requièrent de la part des pouvoirs publics une attention de plus en plus grande aux concepts de LEAN et de benchmarking et à leur mise en œuvre dans le cadre de leur stratégie de développement régional.

Ce processus se justifie d'autant plus que la majorité des collectivités territoriales offrent, du moins sur le papier, les mêmes programmes et outils pour stimuler l'entrepreneuriat, l'innovation et l'attraction de talents et d'investisseurs et que des avantages concurrentiels peuvent naître de la qualité des services liés à la mise en œuvre des programmes, des synergies développées entre les différents intervenants et de leur contribution à la création de valeur ajoutée pour les bénéficiaires finaux de ces programmes.

Le recours à des méthodes de peer review, d'échanges de personnel avec des organisations similaires à l'étranger, et à des méthodes de self-assessment devrait être encouragé. Il serait intéressant d'inclure de telles pratiques dans les projets Interreg afin d'accroître la valeur ajoutée de cet outil de coopération transrégionale.

Il apparaît que dans un grand nombre de territoires, le manque de relations et d'interactions entre les institutions publiques, les organisations intermédiaires, les entreprises privées, les inventeurs, les innovateurs et les investisseurs constitue un des freins majeurs à la diffusion et à l'exploitation optimales des connaissances et donc de l'innovation au sein d'un territoire.

Dans l'esprit des concepts de Six Sigma et de Lean, il pourrait être utile de compléter les analyses SWOT et de chaînes de valeur par une cartographie des compétences régionales et de leurs interactions naturelles afin de stimuler de nouvelles formes de partenariat. La société de consultation américaine NES (New Economy Strategies) a développé le concept de "Community of Innovation (COI) platform and portal" afin d'accélérer le processus par lequel tous les acteurs de l'écosystème innovant d'un territoire entrent en relation et adaptent ainsi leur contribution aux différents besoins des autres secteurs et en particulier des entreprises. Cette façon de procéder aiderait les territoires à adopter les principes de base de la recherche de l'amélioration permanente de la qualité des services de soutien aux entreprises et à l'innovation.

75 Cf. www.new-econ.com
Bibliography and other Sources of Inspiration

Ce document est le fruit de lectures, d'échanges avec des experts, d'exposés, de travaux collectifs, de réflexions personnelles et de contributions intellectuelles pour la mise en œuvre de projets cofinancés par la Commission européenne.

On trouvera ci-après la liste la plus exhaustive possible de mes sources d'inspiration.

**EXPERTS**

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