

Massimo Vanzi

Short note of a strategic plan for the Liguria territory, based on "smart innovation" concepts and focused on birth and growth of innovative companies.

Funded by OCOVA AlpMedNet Project. November 2014



Department of Electrical, Electronics and Telecommunication Engineering, and Naval Architecture University of Genoa, Italy





Table of Contents

1	Intr	oduction	5
2	Wo	rk Done and Key Analysis Results	7
	2.1	SME's main Issues analysed during the OCOVA project	10
	2.2	Startup main Issues analysed during the OCOVA project	12
3	Орр	portunities and recommendations for local SMEs / Startup	17
	3.1	Recommendations for SME's as proposed by OCOVA	17
	3.2	Recommendations for Startup as proposed by OCOVA	19
4	Con	siderations on the total OCOVA territory	22
5	The	Role of OCOVA	23
Α	PPEND	IX A	25
	A sum	mary of the survey results	28
В	IBLIOG	RAPHY	37

1 Introduction

The OCOVA AlpMedNet Project – cofounded by ALCOTRA Program – lasted two years, 2013-2014. Originally designed as a collaboration space among three nearby European regions, Piedmont and Liguria in Italy and PACA in France, with the purpose of realizing:

- **Knowledge exchange**; visibility on the technological and industrial state of art in each territory, with main focus on SMEs and startups, R&D projects in advanced development stage, products and solutions already in the market and technological solutions adopted by public administration;
- Business networking; facilitate meetings between solution providers and recipients in order to start tangible business and partnership opportunities;
- Dissemination of innovation; spreading of innovation approaches and technological solutions as a mean to improve industrial competitiveness and people's quality of life.

Main objective of OCOVA being then the creation of relationship opportunities between the main actors in each geographic area with relevant actors in adjacent geographical areas.

This main objective has been achieved in several ways:

- Organizing an yearly Forum in each geographic region inviting local industrial and public administration representatives together with similar actors in other regions; each yearly Forum was focused on industrial solutions and technological topics relevant to the organizing region and useful to the two guest regions to know more of what is going on in the nearby region and to generate partnership and business opportunities;
- Creating a brand new collaborative web platform focused on social and business networking, cross region information flow, exchange of business and technological knowhow, as a mean to create business and partnership opportunities aside from the main Forums;

 Organizing region-focused formation-information events tightly coupled with the specificities of the local SMEs and public administration requirements, both in terms of technology gaps and collaboration opportunities.

Though most of the considerations and recommendations expressed in this document are strongly dependent on the analysis performed on the Liguria territory, they apply also on the other OCOVA regions, Piedmont and PACA. From what we have seen and the feedback we have received in the OCOVA meetings in Gap and Ivrea and the discussions we had with French and Piedmont companies in Genoa we may conclude that the issues and the opportunities related to SME's and startup are by far the same in all the geographical regions. Even if the three regions are different in terms of local industrial and technology focus, the issues and the opportunities typical for SME's and startup are basically the same.

Main focus of this document is on SME's and Startup, in line and synergy with the Smart Specialization Strategy (2) EU guidelines.

2 Work Done and Key Analysis Results

"In a nutshell, a smart specialisation strategy is an economic transformation agenda based on:

- Choices,
- Competitive advantages,
- Critical mass,
- Collaborative leadership,
- Connectivity,
- Common sense

in order to focus the regions' development on their most specific assets".

Adapted from a presentation of Mikel Landabaso of DG Regio on 28.10.2011.

The concept of smart specialisation strategy can be defined as "an entrepreneurial process of discovery, identifying where a region can benefit from specializing in a particular area of science and technology"(1), and I would add, as a direct consequence, develop and enhance derived and synergic business opportunities.

At the end of 2011, within the framework of Agorada 2011+, a Smart Specialization Strategy document (1) was issued by EU indicating the guidelines that each territory should follow to boost and promote regional assets, including local and regional authorities, universities and research centers and of course local business and industry.

Regione Liguria issued in October 2013 a Smart Specialization Strategy document (2) summarizing what Liguria had done and was doing following the main S3 guidelines, creating a framework or reference for the several regional activities and indicating a path to the future in synergy with EU/S3 recommendations.

Unioncamere Liguria contributed in this direction with an important Project, Inno Pro Ind Catalog (3), issued in June 2014 and reporting regional data on research and innovation coming from a comprehensive survey and additional meetings and discussions performed with more than 60 regional industries and focused on their willingness and capability to innovate, protect and monetize their Intellectual Property (IP) and in general sustain global competition.

OCOVA Project main goals, as outlined in the Introduction, are in perfect synergy with most of the original objectives of S3 and also with many of the outcomes of analyses done so far by the Liguria Region and by Unioncamere Liguria.

For what the other OCOVA geographical areas is concerned, similar considerations in synergy with S3 have been issued both by PACA and Piedmont.

The next part of this Analysis section, starting from the activities and outcomes of the OCOVA Project in 2014, will put in evidence the synergies with what described in the official documents mentioned before, stressing the role of OCOVA achievements and focusing on the feedback received by SME's and startup directly contacted by us or participating to the several events organized in Liguria and other regions within the frame of OCOVA Project.

The next section, "Opportunities and Recommendations for Local SME's / Startup" will try to extract a few guidelines and recommendations supporting "smart innovation" concepts and focused on the birth of new innovative companies and on the growth of existing innovative SMEs.

Main activities performed within the OCOVA project in 2014 and focused on collecting issues and feedback from medium/small companies have been:

- (1) The organization of a Forum in Genoa in June able to gather more than 200 participants, 35 exhibition stands, more than 200 B2B meetings between SME's and startup based in Liguria and potential partners/customers coming from Liguria, Piedmont and France, PACA region;
- (2) Forty-six Elevator Pitches given by startup and SME's in front of the audience and promoting their company project and product/business ideas;
- (3) Four round tables on topics of importance for innovation on the territory, like Technologies for Health, Interaction among Port, City and Territory, Environmental and Energetic Sustainability, Regional Innovation and Competitiveness;
- (4) Two conferences, "Vision of ICT Technologies and Products" held by professor Alberto Sangiovanni Vincentelli of UC Berkeley and "Startup & SME's: Lessons Learned, Guidelines and Trends", held by Massimo Vanzi of Italian Angels for Growth;

- (5) Two Aperi-Network Events organized in Genoa and in Imperia in the fall of 2014 and focused on: "What funding models supporting innovation and growth are available to startup and SME's"; with the participation of leader personalities of the economics-for-innovation world, like Business Angels, Venture Capital / Private Equity Funds, Banks, authorities like Regione Liguria and Unioncamere Liguria, active in supporting innovation in several forms, a private Crowdfunding company, Unicasim, and a University professor reporting on the Minibond funding mechanisms for SMEs.
- (6) An on-line survey described and distributed during the two Aperi-Network events, in synergy with the topics presented, trying to collect feedback from the participating companies on their current funding mechanisms and on what company funding mechanism they plan to use in the future; the on-line survey questions are listed in Appendix A of this document and the feedback received is reported in Appendix B; in addition the two last questions in the survey were focused on how SME's are coping with Innovation, both in terms of what works well from their point of view in supporting innovation processes and what instead should work better (meaning is not working well enough).

Several aspects can be summarized after having performed all these activities and having had the chance to talk and discuss with many of the industrial actors within Ligurian SME's. For most of them the OCOVA Project has confirmed what previously emerged by the analysis performed by Liguria Region and Unioncamere Liguria and reported in (2) and (3); a few aspects, mostly related to one of the mail goals of OCOVA, namely facilitate connections and collaborations across geographical areas, have instead been better addressed during the OCOVA meetings both in Liguria and in the other OCOVA regions.

For what the other OCOVA regions is concerned, detailed lists of the activities performed and data collected are available in the relevant documents issued by the respective partners in the regions.

In the following part of this Analysis section we have summarized the issues emerged during the OCOVA project separating them between issues related to Ligurian SME's and issues related to Ligurian Startup, since hard issues are different in the two cases as well as possible solutions or recommendations.

2.1 SME's main Issues analysed during the OCOVA project

The issue of Innovation

This is issue number one, in a country like Italy, in a region like Liguria there is only one way to compete in a globalized world, that is to develop products that others do not do or do not do as good as us. This is very true also in a country like Italy and in a region like Piedmont as well as in a country like France and in a region like PACA. In other words what analysed in this section is perfectly applicable in the whole OCOVA territory. SME's are in great difficulty in performing Innovation; Innovation requires time and money and most of SME's have limited money to invest in innovation and only a few of them believe innovation is so critical for them to justify looking for extraordinary ways to fund it or to develop it. Innovation requires time to be developed, tested and implemented, this is time of internal people. Innovation can be internally fuelled but can also be outsourced. The few most innovative SME's have internal programs focused to motivate employees to be innovative and even support their ideas in several concrete ways.

In general SME's have no money for innovation, SME's have no time to innovate, and SME's have very limited willingness to outsource innovation.

The issue of "First make money then invest".

This is a typical "old fashioned" entrepreneurial approach; tightly coupled with a funding model exclusively based on dept by Banks. A model which is understandable for large corporations but for sure not the only one and probably not the preferable one for startup and SME's. It is clear that in moment of crisis and in any case while struggling to sustain global competition this very conservative rule does not apply and SME's must adopt more ambitious and necessarily also risky approaches.

The issue of "Small is Beautiful"

The smaller you are the more difficult will be to find time and money to innovate; on average SME's in Liguria are smaller than the Italian average and less innovative (3); but still there are entrepreneurs who fear growth, fear to take the risks related to

possible growth, fear to look for growth by M&As or by partnerships, fear to exit the small, consolidated, often only regional, market focus.

The issue of "Services vs Product Companies"

Italy is one of the industrialized countries with the highest percentage of services companies, more than 65% of GDP (4). Liguria follows the path possibly, in our opinion, with even higher numbers. Piedmont has a stronger industrial background but unfortunately most of it has passed away, Fiat, Olivetti, etc. and the region is focused since several years to redefine itself on wireless technologies, high quality manufacturing and startup opportunities. France is much better positioned than Italy from this point of view, large industrial background, but still not much difference in terms of status and opportunities with respect to SMEs and startup. As Alibaba founder Jack Ma is telling us the business of the future will not require anymore intermediates, meaning people who buy and resell, maybe adding some additional service on top of it; it will be much easier to link via Internet the provider of the product and the final client, bypassing all intermediate layers. Italy lives of intermediation, better focus instead its future business on developing innovative products. Similar considerations are valid for France and even more in French regions far from the rich lle-de-France area.

ICT SME's are mostly services companies, selling consultancy, selling custom design, selling custom software development or selling services around products not internally developed; all very unscalable businesses, with very limited gross margin opportunities.

The issue of "A man only at the helm"

Our modern Italy has been built by our fathers and grandfathers in the 50's and in the 60's during the so called economic boom period after the second world war; the standard entrepreneurship model at that time was exactly the "man only at the helm" model, based on very creative and hard working personalities able to build new business and products that have made Italy famous in the world. This entrepreneurial model cannot be anymore the only one for a modern country operating in a fast changing world, for many reasons long to be mentioned here. More modern and industrialized countries nowadays and in the last 20/30 years have developed a more

effective entrepreneurial model based on a team of founders and investors approach instead of a man only approach. This has several advantages; one of the main one is that in this way there is much less fear to collaborate with other companies and in some cases to merge with other companies. The new company culture is more open to diversity, more open to change and less closed to new ideas. Collaboration and willingness to partner and in some cases to merge with others to grow and better compete is a key aspect of this entrepreneurial model. The Man only at the helm model is still dominating in Liguria.

The issue of "Addressing new markets"

One of the main general problems of SME's is the one of addressing new markets, exiting the "comfort zone" of local market and customer base. This is no different in OCOVA territory SMEs, again if possible even worse here due to cultural, historical and geographical reasons. This is the last "Issue" in this rather long list because OCOVA has focused a lot on this aspect in all the means we could address it. Collecting feedback, organizing many opportunities to meet and start collaborations and fostering cross region and cross country relationships.

2.2 Startup main Issues analysed during the OCOVA project

The Startup entrepreneurial model in Italy is very new, with a good 30-40 years of delay with respect to the US or 20 years with respect to our European country partners. Six years ago very few people in Italy knew what a startup was. In these last six years a lot has been done in this direction, with also a considerable help of the media, and Italy has grown its understanding and perception at a much faster pace than other countries, recovering some of the delay; we can say today to be 8-10 years behind other countries from the point of view of deploying this entrepreneurial model; but today the confrontation is not anymore only with the US, or France/Germany/England etc. but also with what were called only a few years ago "underdeveloped countries"; very smartly all these countries have understood that the only way to close the gap with industrially older countries was to grow at a much faster pace and have understood since the beginning that the startup entrepreneurial model and the focus on markets and technology sectors with high growth opportunities was the best way to do it.

Among Italian regions Liguria is coming as one of the last in building up the right momentum and organizing the necessary activities in this direction. Finally in 2013, as an example, Liguria organized the first startup events, the Startup Week-end and SmartCup Liguria, while in regions like Piedmont or Trentino and other Italian regions these kind of events have been organized since many years. France is better positioned than Italy and has started developing the startup entrepreneurial model ahead of Italy but by no means in a competitive way with respect to US or UK or any of the emerging countries in the world.

Some of the Issues specific for SME's, listed in the previous section of this report, are "by definition" non existing in the Startup world, since the startup entrepreneurial model is exactly defined as a different way to startup a newco without following the old fashioned family/bank relationship. What are then the main Issues emerged during the OCOVA events and discussions impacting the birth and growth of Startup in ALCOTRA?

The issue of "Knowledge"

The general aspect of knowledge is fundamental in this historical phase in Alcotra and touches all aspects of the Startup entrepreneurial model. What is a startup, what is a market, what is a product, what are the basic operative and strategic mechanisms embedded in its approach, its mechanisms and "rules", where to go, how to do it, whom to meet, etc. etc. There is a great need for formation and information flow in this aspect. In OCOVA we have understood well all this and we have done the maximum we could do in this direction, as an example the training sessions organized by Torino Wireless within the frame of the OCOVA Project and the excellent session on entrepreneurship dedicated to medium-high schools in Ivrea in December 2014.

The issue of "Assembling the Team";

One of the fundamental concept of the startup entrepreneurial model is that it is implemented not as a man only approach but as a Team approach, then it is important to assemble the right team at the right moment. Many times we have seen in Italian Angels groups of young engineers with great ambitions and incredible technology focus, unfortunately none of them had the minimum understanding and know-how of what is a company and how to manage it, what is a market, what is a product, etc. In

other situations we met the classical inventor, possibly very bright, but alone. In all cases we suggested to come back once a good team was created, containing possibly all the necessary skills required.

There is a need for creating opportunities for our startuppers to get together, know each other, look and find co-founders. There is a need for establishing the role and the value of experienced advisors contributing to the birth and growth of the startup. In the US no startup is funded without the existence of an appropriate and experienced advisory board.

The issue of "Technology Transfer"

This is a big difference between US and Europe; University, public and private research centers, should have a well established and very competent organization in place to help close the gap between research and application of research results to create business and jobs. Italy is very far from having the right approach in this sense and when something is done very often it does not go in the right direction, privileging the pseudo interest of the research organization much more than the interest of the startuppers and of the company growth. Unfortunately still in too many cases the process of creation of business opportunities out of research results is even limited and hampered instead of being helped and promoted.

The issue of "Entrepreneurial approach"

Young Italians are not anymore what were their father and grandfather from the point of view on the entrepreneurial spirit. For several historical and cultural reasons our young generations do not have the "fire in the belly" theirs parents used to have in the 50's and 60's. There is a lack today of entrepreneurial approach and of a sound risk taking attribute. The startup phenomenon is attracting a lot young people and this is in my opinion one of the most wonderful experiences in having to deal with the startup world. There is a need to push and promote this entrepreneurial approach in our young generations, starting from schools, not only universities but also from elementary schools on.

The issue of "Looking for money"

Of course money is needed to create a startup and to make it grow, there are well established mechanisms to do it according to the company growth phase, these are mechanisms developed by other countries more active than Europe in this sense.

Italy and France should follow what developed by others trying whenever possible to add their own specific values. Italian regions and institutions are starting to be active in this sense adding their contribution. Liguria also, very recently, thanks to the work performed by Ligurcapital, Confindustria Liguria and Unioncamere Liguria. Similar activies and efforts are present in the other OCOVA regions, in fact both Piedmont and PACA are ahead of Liguria in this path. Today it is rather easy to find the usually called "seed money", what necessary to start, either from private or/and public mechanisms, typically from 50K to 3-400K€.

The biggest problem today is rather to find the money required to start boosting the company growth, what is normally called Round A money, typically from 1M to 2-3M€. This problem is common to all OCOVA regions.

The issue of "Execution"

Execution is one of the main issues for startup, due to the fact that very often the founding team is made of young people with limited experience; so the need to introduce since the beginning some experience in the team and adopt appropriate mechanisms to take advantage of execution experience along the way. Often startup fail for lack of execution experience.

The issue of "Growth"

Startup are "condemned to grow", this is good of course under many aspects but also a big threat and a big pressure for the startuppers; there is a need for help and support to startup growth, both in terms of money of course but also and even more importantly in terms of helping them addressing new markets, establishing collaboration and partnership opportunities.

All aspects in common to SME's but more critical for startup and more difficult to establish due to their extremely small size.

The issue of "Exit"

Startup investors and in many cases also founders hope to exit at a certain point, sell their shares and "become rich". In 98% of cases exits are M&A processes. The Italian industrial sector, so heavily lacking medium/large companies who are the obvious exit solution for many startup, is for sure not the ideal playground for startup; there is a need to help startuppers establishing business and creating contacts with more developed countries than Italy, not only for market and business opportunities, not only for funding opportunities but also for exit opportunities.

3 Opportunities and recommendations for local SMEs / Startup

It is appropriate also in this section to separate our considerations between SME's and Startup, since our recommendations are necessarily focused on each of the two company status and history. Startup are Newco's, born and managed according to this innovative entrepreneurial approach; again, even if France is in general better positioned than Italy and within Italy Piedmont is better positioned than Liguria still SME's have typically a rather long history, by choice or by necessity they have not been able to grow and in most cases have remained of a very small size.

3.1 Recommendations for SME's as proposed by OCOVA

Most of ICT SME's in Ocova regions are services companies in the software business, consulting and software house. Many of them sell services around software/hardware products not internally developed, reducing the margin opportunities and increasing the business risk. Most of them sell their services locally, very small the percentage of revenues outside the region and even smaller the one outside the country. This situation is well known and widely acknowledged in the several reports and documents analysing the status of industry in the Ocova regions. As an example innovation capability is below average with respect to other European regions, without forgetting that Italy as a whole is already within what EU calls "Moderate Innovators".

In general the SME's world looks like being split into two groups, one out of five of them shows good market competitiveness, they sell products and services around their products to customers around the world, have no market dependence on Liguria and also reduced market dependence on Italy. Because of their rather healthy business situation they are also capable to innovate, both in terms of technology innovation, business models and business processes.

The remaining part of the SME's, unfortunately the strong majority by numbers, suffer dramatically of the current economic situation, and have no means to react.

Under this scenario the main role of EU, country and regional public interventions should be focused mainly on this part of the local industrial sector, helping them to minimize their lacks and supporting them in a path that they will never be able to follow by themselves alone.

A lot has been done by the OCOVA Project in this direction even if under limited budget considerations, what has been though specifically important is that the key OCOVA original goals and execution schemes have been demonstrated to be the right ones to support exactly this part of the local industrial community. One aspect is very clear, we need to help the local SME's community creating opportunities of collaboration and partnership outside of their limited business geographical area and OCOVA has been strongly focused on this cross-region and cross-country partnership and business collaboration aspect. A few guidelines.

Partnership-Partnership

If you are small and because of it you are unable to invest time and money in innovation then the first solution is to partner with other companies, including competitors, acting together as a larger company. Everyone can learn from others, in most cases 1+1 is more than 2 and what you learn is much more important for you than what others can learn from you. There cannot be growth and innovation without opening oneself to the rest of the companies in the same market sector, nobody anymore in a globalized world may believe to remain alone. Growth by mergers and acquisitions should also be taken into account much more than it is today. Even Google and Apple buy tens of companies every year and this is the main innovation process they have in place.

Organize for Innovation

Gradually import in the company the "Startup approach", train the people on what Startup means, motivate their innovative approach. Organize internal startup championships, select the best internal "entrepreneurs" and the best entrepreneurial ideas, empower them.

Spinoff Innovation

Be open to spinoff new ideas, this may become the main innovation source. It is well known that innovation is much better done in small organizations rather than in large groups. Think at partnering with customers/suppliers/competitors in this spinoff initiative.

Think at moving to a Product Company

Pure services companies may be very successful, but have some inherent drawbacks, like a non scalable business, very limited gross margins and a too small and risky customer base. One way to minimize these drawbacks is to gradually move to sell products, that may have been internally developed as a mean to be more efficient in delivering ones own services or that may come from spinoff initiatives.

Fund Innovation

Banks by no means are the only source of money, think at financial investors and even more at strategic/industrial investors whenever there are synergies with your product/service. Invest in early stage startup, they may become your future innovation hub.

Outsource Innovation

SME's do not outsource innovation, partly because of lack of money to do it and largely because of unwillingness of the entrepreneur to do it. Public institutions and associations should facilitate and support this process. Research organizations should be much more open to partner with SME's and not only with large corporations, they should treat SMEs differently under several aspects understanding the key differences between them.

3.2 Recommendations for Startup as proposed by OCOVA

Any recommendation regarding innovation for SME's may of course be applied also to startup, even if a startup should not be called such without having some innovative proposal, technology wise or business model wise. As previously written Liguria and

Italy in general is catching up in terms of startup culture and actual number of new startup. Thanks to the local "momentum" started in 2013 by the Startup Week-end and StartCup events, the birth of Talent Garden Genova incubator and the very positive role of the Italian Institute of Technology (IIT), we are monitoring the birth of several new innovative startup. During the OCOVA events and meetings in 2014 we have anyhow registered for all Ocova regions similar requirements than for other European regions. Namely.

Develop "Entrepreneurial Thinking" and "Risk Taking Attitude"

This is one of the key aspects in Italy limiting the birth of new innovative companies. For historic and cultural reasons our younger generations do not show a strong risk taking attitude and a real entrepreneurial thinking attitude. The role of Universities and schools in general, including lower grade schools, should be the one of identifying, facilitating and developing entrepreneurial thinking in our students and research teams. 70% of startup ideas and projects are generated within research teams, either in schools or within industrial R&D teams, where entrepreneurial thinking lacks considerably.

Be Smart in looking for money

Money is available to startup, also in Italy, there is a need to be smart in looking for it; putting maximum emphasis in the elevator pitch and in the business plan development; using as much as possible seed money coming from F&F and Institutions (district, regional, state, European, schools, etc.) to consolidate startup ideas and generate IPRs. Assemble syndicates whenever possible, adding ideally contributors also from foreign countries, they will be very useful in second/third funding rounds when Italian investors are still having difficulty to gather. Try not to give "too much power" to early to VC reducing too early the founders stake; this will happen sooner or later but it has to happen because the company value and size has grown considerably and not because it is necessary in order to keep being alive. Take advantage of business angels/expert advisors, they can help a lot early stage companies to minimize their lacks and boost their strengths.

Develop market analysis and company structure know-how

The large majority of startup ideas exit from research teams; beside lacking in general entrepreneurial thinking, these teams additionally lack considerably market analysis and company structure know-how; one way to eliminate this lack is to facilitate the merge between engineering groups and business groups, MBA and alike; not by trying to generate mixed skills within one person but much more facilitating the collaboration and the team building among people with different skills.

Develop cost sensitivity;

Develop and promote "cost sensitivity" in research/design engineers; too often research engineers and managers are used to ask for money for their own research activity as if money would be a "given" that needs, under any circumstances to be spent for the technology development. This approach can be very negative in startup where money by definition is rare and precious and needs to be utilized with great grain if salt and frugality.

Develop product manufacturing know-how

Very often innovative products do not find a market path due to too expensive or difficult manufacturing requirements. The concepts of manufacturability and maintainability of new products should enter strongly our engineering schools.

Be prepared to work a lot!

4 Considerations on the total OCOVA territory

Some of the considerations expressed in this document are focused on the Liguria territory but they apply as well to the other two OCOVA regions, Piedmont and PACA. The several meetings and events organized in Gap and in Ivrea have demonstrated that the issues and the opportunities for SMEs and startup are basically the same in all regions.

Each geographical region has specific requirements and opportunities related to the local industrial background and future goals, but in all cases issues like:

- 1. Lack of entrepreneurial spirit in young generations
- 2. Lack of innovation in SME's
- Difficulty to establish innovation outsourcing programs with research centers and universities
- 4. Difficulty to create business partnerships if not only very locally
- 5. Difficulty to establish joint product development programs

Are present and diffused in all OCOVA regions.

Finally activities focused on:

- 1. Promotion of startup entrepreneurial model
- 2. Identification and promotion of development activities for SME's focused on enhancing their Innovation capabilities including innovation outsourcing programs in collaboration with research centers and Universities
- Identification and promotion of development activities for SME's focused on enhancing their willingness and capability to establish cross region and cross country product development and joint marketing partnerships
- 4. Formation and training for the identification, facilitation and development of "entrepreneurial thinking"
- 5. Creation of Information Hubs focused on informing new startup and existing SME's willing to innovate and grow to better compete with the rest of the world

Are the target activities that OCOVA should develop to offer better service and contribution to the development of the local regional SME/Startup industrial sectors.

5 The Role of OCOVA

After these long Analysis and Recommendation sections, it should be rather clear that the original OCOVA objectives as described in the Introduction to this document were all very tuned and relevant to the needs and opportunities of SME's and startup within Liguria and all other OCOVA regions, even if with local differences and intensity of needs.

OCOVA Project results, within the limited budget available, have been considerable and have contributed to reach the project objectives in strong synergy with all other existing local public/private activities in this direction.

There is discussion on-going if extending this very collaborative activity to an OCOVA II Program for another two years starting possibly in 2016.

In case this will happen, my recommendation would be to add to the original objectives a stronger and more focused effort on fostering two key strategic aspects on which to build:

- Partnerships
- Innovation

Partnerships meaning:

- 1. Sales partnerships; sales channels, distribution etc.
- 2. Joint marketing partnerships
- 3. Joint product development partnerships
- 4. Joint product engineering partnerships
- 5. Joint product manufacturing partnerships
- Joint applied R&D partnerships; company with company (customer, supplier, competitor, etc.), company with applied research centers and company with design service suppliers.

Across regions and across the countries involved.

Innovation meaning:

- 1. Complementing internal limited SME's resources dedicated to innovation activities; more resources coming from partner companies;
- 2. Complementing internal resources dedicated to innovation in terms of skills of people; different companies may add different skills;
- 3. Outsourcing innovation to partner companies and/or partner design and product development companies;
- 4. Promoting innovation by means of SME's spinoff processes or by means of M&A processes.

In other words the focus of OCOVA II activities should not be only in helping generating short term business opportunities but rather enable and facilitate medium to long term relationships that will allow the local SME's to grow, consolidate and innovate offering a concrete solution to current SME's key problems.

APPENDIX A

The on line survey distributed during the two Aperi-Network events in Genoa and in Imperia in the fall of 2015.

Indagine sulle PMI in ambito ICT	Uscire dal sondaggio					
1. Qual'è la tipologia della tua PMI in ICT?						
Prodotti e/o servizi informatici/elettronici self developed						
Prodotti e/o servizi informatici/elettronici di terze parti						
Servizi di consulenza/design informatici/elettronici						
Altro (specificare)						
2. Che dimensione ha?						
2 - 9 addetti						
0 10 - 29 addetti						
30 - 49 addetti						
50 - 99 addetti						
> 100 addetti						
3. Come vi siete finanziati finora? con i nostri profitti						
banche						
fondi di private equity						
finanza agevolata (UE, stato, regione, ect.)						
business angels						
minibond						
quotazione in borsa						
Altro (specificare)						
4. Come pensate di finanziarvi in futuro?						
con i nostri profitti						
banche						
fondi di private equity						
finanza agevolata (UE, stato, regione, etc.)						
business angels						
minibond						

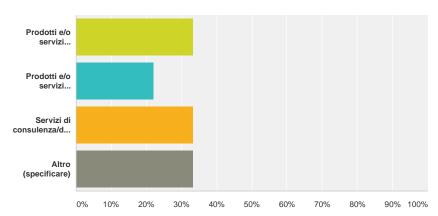
	quotazione in borsa
Altro	(specificare)
5. Q	ual'è la percentuale del fatturato fuori dalla Liguria?
	0 %
	< 10 %
	10 - 30 %
	30 - 50 %
	50 - 80 %
	> 80 %
6. Q	ual'è la percentuale del fatturato fuori dall'Italia?
	0 %
	< 10 %
	10 - 30 %
	30 - 50 %
	50 - 80 %
	> 80 %
7. C	osa funziona bene nella tua esperienza attuale?
	Burocrazia pubblica
	Supporti pubblici in generale alle PMI
	Capacità interna di R&S e di innovazione
	Possibilità di R&S finanziata
	Capacità di realizzare partnership industriali di sviluppo prodotto/servizi
	Capacità di internazionalizzare il proprio business
	Accesso ad aggiornamenti sui nuovi mercati emergenti (social, digital, IoT, wearable, 3D printing, wireless,
etc.)	
PMI	Conoscenza e sviluppo dei nuovi modelli imprenditoriali (startup) come volano per l'innovazione della tua
	Accesso ad analisi di mercato utili per il tuo business
	Capacità di finanziare la crescita e lo sviluppo
	Altro (specificare)
	(5-555)

osa potrebbe / dovrebbe funzionare meglio?
Burocrazia pubblica
Supporti pubblici in generale alle PMI
Capacità interna di R&S e di innovazione
Possibilità di R&S finanziata
Capacità di realizzare partnership industriali di sviluppo prodotto/servizi
Capacità di internazionalizzare il proprio business
Accesso ad aggiornamenti sui nuovi mercati emergenti (social, digital, IoT, wearable, 3D printing, wireless,
Conoscenza e sviluppo dei nuovi modelli imprenditoriali (startup) come volano per l'innovazione della tua
Accesso ad analisi di mercato utili per il tuo business
Capacità di finanziare la crescita e lo sviluppo
Altro (specificare)
cosa vorresti ti fosse chiesto, cioè quali aspetti della vita presente e futura a tua PMI ritieni più critici e non ancora adeguatamente affrontati e Istituzioni o dai vari supporti alle Imprese?
Fine

<u>Gestito da SurveyMonkey</u> <u>Crea adesso gratuitamente le tue indagini on-line!</u> A summary of the survey results

Q1 Qual'è la tipologia della tua PMI in ICT?



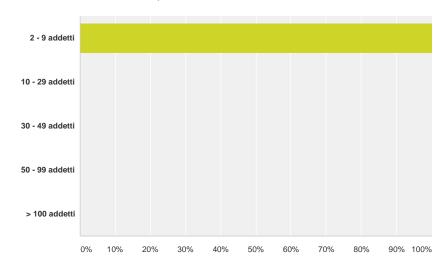


pzioni di risposta	Risposte
Prodotti e/o servizi informatici/elettronici self developed	33,33%
Prodotti e/o servizi informatici/elettronici di terze parti	22,22%
Servizi di consulenza/design informatici/elettronici	33,33%
Altro (specificare)	33,33%
otale rispondenti: 9	

#	Altro (specificare)	Data
1	impresa edile con metodologie innovative	26/11/2014 22:12
2	PRODUZIONE MOTORI STIRLING PER MICROCOGENERAZIONE	04/11/2014 18:36
3	Pur avendo partecipato all'evento, non sono un imprenditore ma uno studioso interessato ai temi dell'imprenditorialità	01/11/2014 11:25

Q2 Che dimensione ha?

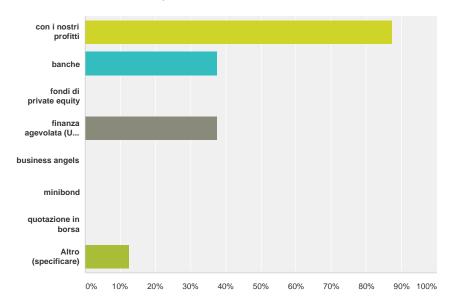
Hanno risposto: 8 Hanno saltato la domanda: 2



Opzioni di risposta	Risposte	
2 - 9 addetti	100,00%	8
10 - 29 addetti	0,00%	0
30 - 49 addetti	0,00%	0
50 - 99 addetti	0,00%	0
> 100 addetti	0,00%	0
Totale		8

Q3 Come vi siete finanziati finora?

Hanno risposto: 8 Hanno saltato la domanda: 2

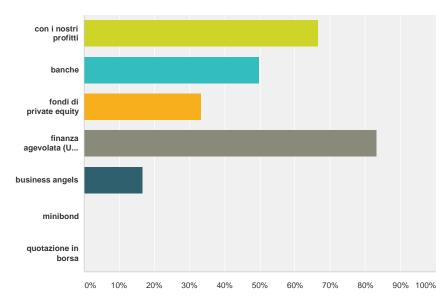


Opzioni di risposta	Risposte	
con i nostri profitti	87,50%	7
banche	37,50%	3
fondi di private equity	0,00%	0
finanza agevolata (UE, stato, regione, ect.)	37,50%	3
business angels	0,00%	0
minibond	0,00%	0
quotazione in borsa	0,00%	0
Altro (specificare)	12,50%	1
Totale rispondenti: 8		

#	Altro (specificare)	Data
1	PICCOLO INVESTITORE INTERESSATO A SVILUPPO SINERGIA INDUSTRIALE	04/11/2014 18:36

Q4 Come pensate di finanziarvi in futuro?



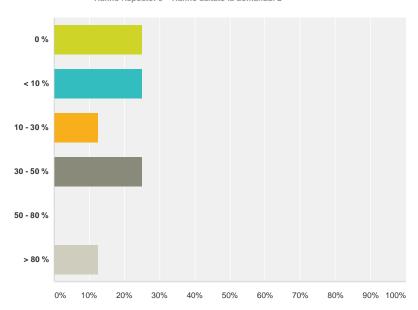


Opzioni di risposta		
con i nostri profitti	66,67%	4
banche	50,00%	3
fondi di private equity	33,33%	2
finanza agevolata (UE, stato, regione, etc.)	83,33%	5
business angels	16,67%	1
minibond	0,00%	0
quotazione in borsa	0,00%	0
quotazione in borsa ale rispondenti: 6	0,	00%

#	Altro (specificare)	Data
1	Non ancora definito	28/10/2014 17:27

Q5 Qual'è la percentuale del fatturato fuori dalla Liguria?

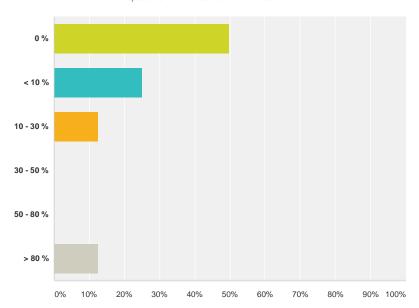




Opzioni di risposta	Risposte
0 %	25,00% 2
< 10 %	25,00% 2
10 - 30 %	12,50%
30 - 50 %	25,00% 2
50 - 80 %	0,00%
> 80 %	12,50%
Totale	8

Q6 Qual'è la percentuale del fatturato fuori dall'Italia?

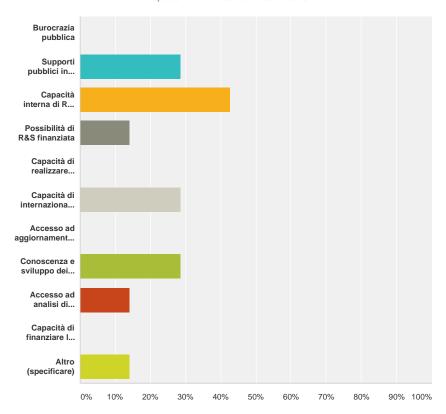
Hanno risposto: 8 Hanno saltato la domanda: 2



Opzioni di risposta	Risposte	
0 %	50,00%	4
< 10 %	25,00%	2
10 - 30 %	12,50%	1
30 - 50 %	0,00%	0
50 - 80 %	0,00%	0
> 80 %	12,50%	1
Totale		8

Q7 Cosa funziona bene nella tua esperienza attuale?

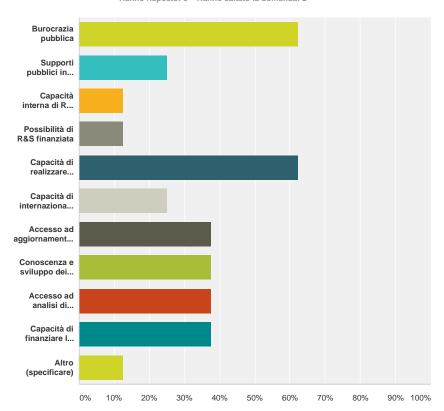
Hanno risposto: 7 Hanno saltato la domanda: 3



pzioni di risposta		Risposte	
Burocrazia pubblica	0,00%	0	
Supporti pubblici in generale alle PMI	28,57%	2	
Capacità interna di R&S e di innovazione	42,86%	3	
Possibilità di R&S finanziata	14,29%	1	
Capacità di realizzare partnership industriali di sviluppo prodotto/servizi	0,00%	0	
Capacità di internazionalizzare il proprio business	28,57%	2	
Accesso ad aggiornamenti sui nuovi mercati emergenti (social, digital, IoT, wearable, 3D printing, wireless, etc.)	0,00%	0	
Conoscenza e sviluppo dei nuovi modelli imprenditoriali (startup) come volano per l'innovazione della tua PMI	28,57%	2	
Accesso ad analisi di mercato utili per il tuo business	14,29%	1	
Capacità di finanziare la crescita e lo sviluppo	0,00%	0	
Altro (specificare)	14,29%	1	
tale rispondenti: 7			

Q8 Cosa potrebbe / dovrebbe funzionare meglio?

Hanno risposto: 8 Hanno saltato la domanda: 2



pzioni di risposta		Risposte	
Burocrazia pubblica	62,50%	5	
Supporti pubblici in generale alle PMI	25,00%	2	
Capacità interna di R&S e di innovazione	12,50%	1	
Possibilità di R&S finanziata	12,50%	1	
Capacità di realizzare partnership industriali di sviluppo prodotto/servizi	62,50%	5	
Capacità di internazionalizzare il proprio business	25,00%	2	
Accesso ad aggiornamenti sui nuovi mercati emergenti (social, digital, IoT, wearable, 3D printing, wireless, etc.)	37,50%	3	
Conoscenza e sviluppo dei nuovi modelli imprenditoriali (startup) come volano per l'innovazione della tua PMI	37,50%	3	
Accesso ad analisi di mercato utili per il tuo business	37,50%	3	
Capacità di finanziare la crescita e lo sviluppo	37,50%	3	
Altro (specificare)	12,50%	1	
tale rispondenti: 8			

BIBLIOGRAPHY

- (1) EURADA NEWS Nr 339 8.12.2011
- (2) Smart Specialization Strategy, Regione Liguria, October 2013
- (3) Rapporto Inno Pro Ind, UNIONCAMERE Liguria, June 2014
- (4) CrESIT 2010