Innovation Factory for Sharing Knowledge[*]

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Abstract

The introduction of an innovative organization like Digital Borgo in a strongly conservative context, made mostly by SMEs and few big companies, often with no relationships to each other modify their interests in collaborating and exchanging knowledge. Overcoming all limits, hurdles and an unfavorable mindset, we managed to define a corporate accelerator model that can represent a virtuous example, helping corporates, entrepreneurs, chambers of commerce and universities to collaborate to foster innovation. We are confident that in the future we will be able to say that our model has created a more connected ecosystem among entrepreneurs and innovating corporates, making Abruzzo a region where small cities and low cost of life becomes an advantage for setting up a great ecosystem for innovation and smart growth.

1. Digital Borgo

Digital Borgo was born in 2013 in Pescara, Abruzzo, on the east coast of Italy, 200km away from Rome. Some of us were returning from abroad, very convinced about living here in Abruzzo and doing here some disruptive projects. Others were local entrepreneurs, interested in putting into practice their idea of creating a local network and bring some innovation in this small region. The initial idea was to make a business network of companies providing digital services. The network could have helped every company to expand its business capability and services. Aware of our strength as a group (Lewin said that a group is more than the sum of its members; Lewin, 1972) first of all we intend to become a center of competence for digital technology and innovative business in the center of Italy.

The second idea was to realize a business incubator: Pescara seemed not to be affected by any of the world ongoing phenomena about start-ups, innovation, etc. We thought that exchanging knowledge and creating a context culturally suitable could have been the only way to pursuit our idea of innovation, particularly of open innovation (Chesbrough, 2003). So the question was: "How can we made

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participating all the economic and political stakeholders to our project? How can we make them feeling of our issue as a compelling one?". In contrast with the old paradigm of closed innovation we think that innovation requires collaboration and a bit of anarchy, as everybody must have the chance to innovate by himself in his sector, and hopefully sharing his knowledge to somebody else, in a circular route of innovation which for some ways remembers the circular model of design thinking process (Stickdorn & Schneider, 2011). We also think that innovation is a chain of actions, so that different actors can work separately on a separate basis for a common project, in order to take the best advantage of their expertise and getting the best result with low risk of failure and lower investment for each.

Experiences from some of the best start-ups ever (Airbnb, for instance), the entire model of the open source software production or better the crowdsource models, have demonstrated that sharing and collaborating is the new paradigm: so why don't bring back this model to local stakeholders, even though they have never used it so far? So we started spreading our knowledge around, to create a context culturally mature in which implement our model.

After 3 years, we can say we made it: Digital Borgo has created a physical and virtual space for the economic and social growth of Abruzzo. We became a reference point in the region for start-ups and entrepreneurship support: we raised the need of introducing innovation and digitally transform companies through the start-ups model (Furr & Dyer, 2014) and creating an open space for innovation.

2. Understand the context, Making the context

When we started in 2013 in Abruzzo region there were 14 innovation hubs (including hubs for ICT, advanced services and internationalization), one of the most important Italian districts for automotive (Val di Sangro), some important multinational companies like Fater, Valagro, De Cecco, Tecnomatic, Micron, LFoundry, and an ongoing funding opportunity for start-ups based on public investments (Starthope call), which was attracting here several entrepreneurs and start-uppers from all over Italy.

At the first start up weekend (https://start-upsweekend.org/) we had more than hundred participants, at the first 3D faire (http://www.starter3d.com/) we had two thousand applicants in 3 days. In 2014/2015 we organized 22+ events for entrepreneurs (seminaries, workshops, Start-ups School – one-week program for university students, a university project work combining our incubated start-ups and university students, 2 investor days, 4 big events – 2 Start-ups Weekends, 2 Starter3D Fairs, one-year special project for disabled young people, a six months lasting project with monthly informal cocktails to put into relation entrepreneurs and start-uppers).

Our work has been so far mainly focused on creating a suitable context, where suitable means the ability to absorb innovative concepts and consequently to produce innovative ideas, especially amongst young people.

Nevertheless, one of the big issue to solve is still to get public stakeholders involved, and this is the reason why we still consider the context as unfavorable.

In the sharing economy era, when people are used to share knowledge and resources, when university programs are not always up-to-date, and especially in Italy the distance between public institutions and private companies is sidereal, we need open innovation systems because every single actor needs to innovate and to integrate with the surrounding context (Chesbrough, 2003 e 2006). No islands of wealth and culture, but a widespread innovation environment which can significantly change Abruzzo region.

Most of Abruzzo companies are SMEs, with a very low inclination to internationalization (except the agrifood industry) and distant from digital transformation (often are family businesses). Pescara airport offers few routes, and universities look appealing only for people from adjacent regions.

To make a difference in this contest, we must build a high-specialized innovation system, local and open, to make Abruzzo attractive for foreign students, start-uppers and entrepreneurs from all over the world. We need to build up a positive ecosystem focused on innovation, research and development in specific sectors like agrifood, aerospace or tourism, which are strategic for lots of regional companies and in which Abruzzo can offer an excellent expertise. But in order to do this we strongly need to get public actors directly involved in a common project: small companies often are not able to implement innovation on their own and it is often difficult to access public funds, so it is necessary to create a culture of digital innovation also in collaboration with institutional actor like the Chamber of Commerce, universities, professional associations.

Both education and work in fact have to be oriented to a visionary development: in this context Digital Borgo acts as an evangelist, corporate mentor and trustworthy third party which trigs innovation and digital transformation throughout companies, institutions and universities, but we also need their commitment to transform innovation into a concrete development.

3. Methodology

Digital Borgo is a network of companies ('rete d'impres') providing digital services and business incubation.

Our working model is based on two pillars: digital transformation and start-ups incubation. Through studying and applying digital transformation we help our clients to wade across this moment of tremendous revolution which is happening in this decade (Ismail, 2015; Caudron & Van Peteghem, 2014). We provide learning paths, practical sessions and support on implementing innovation and transformation through digital technologies. Through business incubation we help start-ups to realize their business idea, and at the same time we continuously learn how to innovate companies which are the cutting edge of digital business, operational and customer experience new models (Thiel & Masters, 2014; Ismail, 2015).

We organize events and seminaries acting as an intermediary of knowledge amongst various stakeholders. We do a kind of translation of innovation into physical reality.

The relevant point of this model is that we have created a circular chain of value: we get value from start-ups, we give this value to our clients, and we return back this value to our community through several events. We work to break down the isolation of the single actor across the chain, we bring knowledge where it is lacking, we put into relation start-ups and mature companies where different models bump into each other (Furr & Dyer, 2014).

We fund innovation and together we generate innovation, but there are two minimum requirements to let this model works: one is that Digital Borgo itself should act as a learning organization, currently reshaping its business, operational and customer experience model (again); another one is that companies have to invest money on R&D with start-ups. Companies must start to intend development of new solutions (products or services) as an open process: if Digital Borgo is the intermediary, companies are the first trigger to innovation.

We are so strongly focused on digital (tools, processes, innovation) because in the last 20 years technology has irreversibly changed our life: human behavior, business, life style and expectations have enormously changed because of (thanks to) technology development. We can now observe that companies which have used technology as a lever have had an exponential growth, up to 10 times more than traditional businesses. We potentially face a new Cambrian revolution (Ismail, 2015; Westerman et al., 2014). In the meanwhile, also business models are changed: if we think about Uber, Airbnb, or about IoT and the big data market, we can be sure that the great revolution maybe has not started yet.

The question seems easier for start-ups, but how can existing companies embrace this revolution and take advantage from it?

The big issue actually is not digitizing existing models and processes, but starting from technological opportunities and then building new business strategies based on them. This is a difficult concept to understand for companies that are running their business since years (especially if they have done it well), but this is the real digital transformation we are looking for.

Dinosaurs are dying: which new species will grow up now?

To answer to this question, we organize hackatons, jams, start-ups weekends, and other fast prototyping events to make people at ease with a new way of implement ideas, making them more and more confident in this very precarious context. Innovation is an unending loop (Cusumano, 2010; Thiel & Masters, 2014): through the lean methodology and the design thinking process we make people involved in a short and effective innovation process as a trial. The idea of an iterative process for generating innovation (Ries, 2011; Stickdorn & Schneider, 2011) matches perfectly with the agile business model of many contemporary start-ups: no expensive assets to buy, infrastructures and services available in cloud, few employees, and a great attitude to failure as a minimum requirement to survive.

Transforming big companies and make them working with start-ups requires strong leadership capabilities and a deep understanding of the necessity of transformation to afford the future. For this reason we are getting public institutions, universities, mature companies and start-ups involved in an unique project: because the world is changing rapidly, and the last arriving is the first dying. Especially for a region like Abruzzo, it is unconfutable necessary to innovate, to transform and to stay connected to the rest of the world.

4. Building a Fortress: Corporate Accelerator & Innovation Labs

Capgemini (Capgemini, 2011) reminds us that the 38% of the major 200 companies all over the world has created an innovation lab inside their organizations.

But what is exactly an innovation lab? There are no exact definitions valid overall: an innovation lab could have no precise scope, or having many different purposes. It can be made by a single organization, or can be shared between several actors. There is no template for organizing a good innovation lab, and often it is not even clear why to do it.

Analyzing our context, we made up this idea of a hybrid model of innovation lab, in which several actors can be involved and invest money (so, it is open) but it also presents a certain focus on specific sectors (like agrifood, for exemple) strongly supported by a couple of multinational companies interested in developing innovation in their core business (so, it is closed). The idea of a corporate accelerator could respond positively to companies and young start-uppers needs, because they can work together on a defined line of products or services, walking on a signed path with some possible detours. Moreover, bringing the lean start-ups model into mature organization compels big player to rethink about their business, operational and customer experience models, which are the three pillars of digital transformation (Ries, 2011; Furr & Dyer 2014; Caudron & Van Peteghem, 2014).

In such an underdeveloped region like Abruzzo, the real issue is attracting talents and mixing them into the social and economic context. So the question is: how can we *integrate into the context* new talents so that everyone can feel the benefit of new ideas? How can we help companies to innovate and to have a positive impact on the wider social and economic context?

We would say: sharing our knowledge first of all, then connecting stakeholders and focus them on a common project, support entrepreneurs and start-ups on developing new ideas, and eventually make sure that these processes have a positive income for everybody.

There are several models of innovation labs (Nagji & Tuff, 2012):
- Core innovation
  Teams working on the core product of a company
- Peripheral
Innovation journeys without a prospect of delivery and going far from the core business
- Adjacent
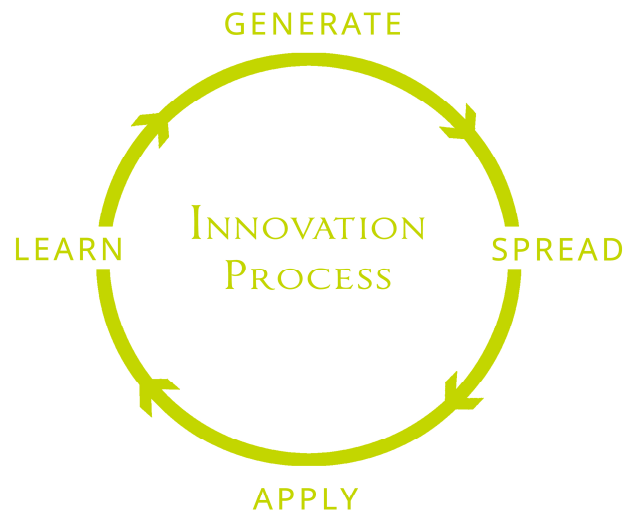Working on complementary core business projects
- Disruptive / Transformational
Disrupting the core business, looking for absolutely new product or services
- Superlab
Combining one or more of the above, with an accelerator program and a physical space for hackatons and jam.

Figure 1: *Innovation Process*

Digital Borgo is working on the last type of innovation lab. It is clear that education has got an impressive role in this project: the fortress has to be guarded by universities, public institutions and private actors (mature companies and start-ups), everybody interested in developing a suitable contest for innovation and everybody investing money.

How can different actors work together? Which strategy can they use?

Hybrid and interdisciplinary knowledge is a must, but having an innovation strategy is a duty. Innovating can be very frustrating, because of the difficult to execute innovative projects and because too often innovation is not aligned with business.

So developing a strategy could help to avoid this lack of focus and this uselessness of promoting innovation that sometimes happens (Pisano, 2015).

More than applying best practices o great methods (like Lean start-ups or Design thinking) the point is building a system for innovation: are all the actors focused on the same objective? Is there a clear commitment on developing innovation and implementing new ideas? Are mature companies and public institutions aware of the necessity to digitally transform them?

And, eventually, what is innovation? Which kinds of innovation will we pursuit? (Pisano, 2015).

Probably we will have to afford trade-offs, and surely the original project of an innovation lab including a corporate accelerator will be much different than it was in our mind. But the building of this diversity is one of the most important benefit of the entire project, because it is about the cultural and economic growth of Abruzzo, which has to pass from digital innovation.

5. Conclusion

Having a wide and shared strategy means thinking about the future. Larry Page, Google CEO, recommend to "don't miss the future": in our language it means continuously innovate methodologies and processes, where the most important word is probably continuously.

Making Abruzzo connected with the rest of the world, developing local economy and make the region attractive for foreign investors, students, entrepreneurs and start-ups is possible only through strengthening the culture of digital and new technologies, using them as a model to transform our local economy.

To let our economy survive and earning a leading role in the world market we cannot avoid transforming digitally our big companies, and making them working with start-ups in order to absorb their methodologies and business models.

It has to happen into corporate accelerator and labs which are actually hubs of innovation, not just solitary successful experiments unrelated to the context in which they are.
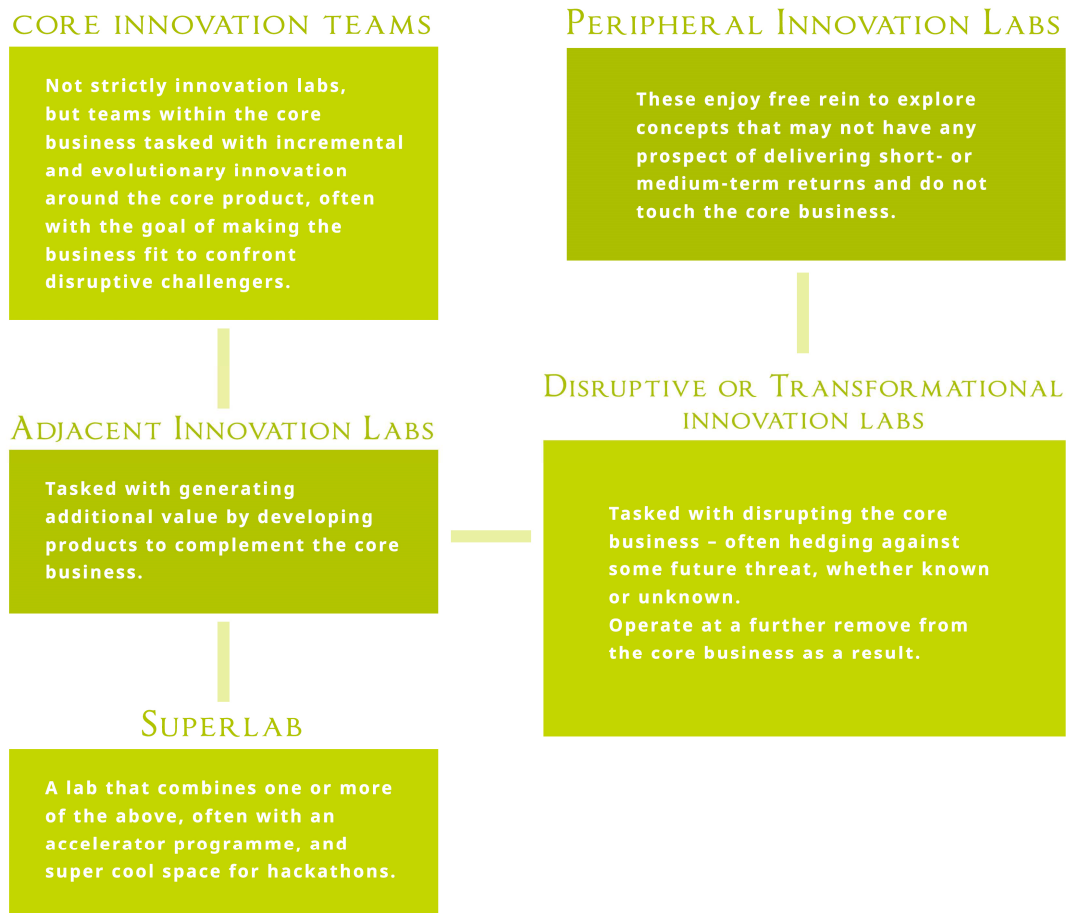
Mature and emerging companies have to be aware that investing in innovation is a requirement to survive, and that this innovation necessarily has to be digitally oriented.

Our government has to support in any possible way the rise of start-ups and new businesses, even though a high percentage of them will be fail: in Italy and especially in Abruzzo it is necessary to re-activate local economy and connecting companies globally. In other words, we need *innovative projects in an innovative context*. And we think that open innovation is the only way to do it: aware of the importance of creating hubs of excellence in certain sectors (e.g. agrifood) we are also convinced that innovation is a cross phenomenon, which can involve and swamp with its energy different economic and social areas.

Digital Borgo project focuses on education because in this world changing so rapidly we cannot miss the future, as Larry Page said, so we cannot miss to be always up-to-date and rethink our behavior as a people, our business models as a companies, our areas of action as public institutions. We wish for public investments in Abruzzo not just to fund start-ups, but to create a context in which new projects can be developed and a culture of digital innovation can be established.

Innovating by example is our model: we want to create cutting edge innovative projects that can lead a local remarkable change and being an example for the rest of the world. Bu in order to do it we need to think about the future in an exponential way, no longer linear as it has been so far: bureaucracy could be smarter and faster, methodologies and models are liquid, variable, agile. In the knowledge economy our mission is to implement an iterative process of generating knowledge, spreading it, applying it, and generate it again.

Figure 2: *Innovation Teams and Labs*

CORE INNOVATION TEAMS

Not strictly innovation labs, but teams within the core business tasked with incremental and evolutionary innovation around the core product, often with the goal of making the business fit to confront disruptive challengers.

PERIPHERAL INNOVATION LABS

These enjoy free rein to explore concepts that may not have any prospect of delivering short- or medium-term returns and do not touch the core business.

ADJACENT INNOVATION LABS

Tasked with generating additional value by developing products to complement the core business.

DISRUPTIVE OR TRANSFORMATIONAL INNOVATION LABS

Tasked with disrupting the core business – often hedging against some future threat, whether known or unknown.
Operate at a further remove from the core business as a result.

SUPERLAB

A lab that combines one or more of the above, often with an accelerator programme, and super cool space for hackathons.

Everybody has to be the disruptor of itself through innovative ideas and ideals, the new levers of marketing. We have learned how to scale technology: now we have to scale organizations and existing business and working models (Ismail, 2015).

Bibliography

Antikainen, M. J., & Vaataja, H. K. (2010). Rewarding in open innovation communities-how to motivate members. *International Journal of Entrepreneurship and Innovation Management*, 11(4), 440-456. http://dx.doi.org/10.1504/IJEIM.2010.032267

Arrigo, E. (2012). Alliances, Open Innovation and Outside-in Management, Symphonya. Emerging Issues in Management (symphonya.unimib.it), 2, 53-65

http://dx.doi.org/10.4468/2012.2.05arrigo

Brondoni, S.M. (2012). Innovation and Imitation: Corporate Strategies for Global Competition, Symphonya. Emerging Issues in Management (symphonya.unimib.it), 1, 10-24 http://dx.doi.org/10.4468/2012.1.02brondoni

Brondoni, S. M. (2008). Market-Driven Management, Competitive Space and Global Networks, Symphonya. Emerging Issues in Management (symphonya.unimib.it), 1, 14-27.

Caudron J., Van Peteghem D. (2014). Digital transformation. A model to master digital disruption, Duval Union Consulting.

Chesbrough, H. W. (2006). The era of open innovation. *Managing innovation and change*, *127*(3), 34-41.

Chesbrough, H. W. (2006). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business Press.

Chesbrough, H., Vanhaverbeke, W., & West, J. (2006). *Open innovation: Researching a new paradigm*. Oxford University Press on Demand.

Cusumano, M.A. (2010). Staying power: six enduring principles for managing strategy and innovation in an uncertain world, Oxford University Press.

Furr, N., Dyer, J. (2014). The innovator's method: bringing the Lean start-ups into your organization, Harward Business Review, Boston.

Ismail, S. (2015). Exponential organization, Prefazione di Fabio Troiani, 2015, Marsilio Editori, Venezia 2015.

Lewin, K. (1972). I conflitti sociali. Saggi di dinamica di gruppo, Franco Angeli, Milano, 1972.

Made by many (2016). Innovation labs 2016, Volume 1: Asking big questions about Innovation lab, New York.

MIT Center for Digital Business and Capgemini Consulting (2011). Digital transformation: a road-map for billion dollar organizations, Cambridge.

Nagji, B., & Tuff, G. (2012). Managing your innovation portfolio. *Harvard Business Review*, *90*(5), 66-74.

Pisano, G. P. (2015). You need an innovation strategy. *Harvard Business Review*, *93*(6), 44-54.

Riboldazzi, S. (2015). R&D and Product Engineering in Global Pharmaceutical Companies, Symphonya. Emerging Issues in Management (symphonya.unimib.it), 2, 57-74.

Ries, E. (2011). The Lean Start-ups. How today's entrepreneurs use continuous innovation to create radically successful business, Crown Business, New York.

Stickdorn, M., Schneider, J. (2011). This is service design thinking, Wiley.

Thiel, P., Masters, B. (2014). Zero to one: notes on Start-ups or how to build the future, Crown Business, New York.

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.