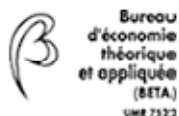evo|REG

Virtual Open Projects and Communities

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1.   Introduction and objectives

Nowadays almost any work and business activity is developed through interacting with lot of external elements. Open Innovation is – because of its profitability[1] – one of the most known way of interaction. It is a way for organizations to innovate faster and incurring in fewer costs. In fact, as many authors and studies highlight, sometimes is the only way to innovate in very competitive markets and societies. Individuals operate in similar way. Almost every work practice in any organization uses directly or indirectly some kind of interaction with elements outside the company. From expert's forums, where an employee can access to some support, to blogs, wikis and other sources that can provide key help to advance in day-to-day regular activity.

It is clearly unthinkable today to conceive an organization without access to Internet. Old internal policies keeping employees away from its use are now obsolete and counterproductive. Openness is synonym of efficiency in terms of productivity. The net seem to be a necessary tool for knowledge workers. Another striking phenomenon is related to free distribution of electronic goods. New ways of creating things, sharing them and licensing its use have risen. One of the starters of this new paradigm was Open Source (OS) community. OS is a new model of collaboration for producing outstanding software as Linux. The idea was born in a university environment to allow students know and use the software code, so a new type of protection was generated: GNU Generic Public License.

As Raymond (1997) described in his seminal paper "The cathedral and the bazaar", open collaborative projects provide better, faster and more reliable results compared to traditional private and closed ways of producing.[2]

This model has exceeded software industry and has reached many others economic sectors. From intellectual ideas generation, music, movies, books among others. Today it is common to consult Wikipedia rather than any other encyclopaedia. It is not a question of accuracy and rigor, rather than just use. A decade ago, no one economist could predict that this open and collaborative project, feed by anonymous individuals around the world in an altruist way, could beat Microsoft Encarta.

We propose to use VOP&Cs as a mix of two concepts that in fact, use to be present simultaneously. Those two concepts are:

A) Virtual Open Projects

There are thousands of projects started by small groups of people, sometimes even in a face to face manner, which later open their initiatives on Internet in order to share their experiences and results. It is a wider concept that shares the idea or challenge they face and normally, if it is attractive, the community happens after, as a consequence.[3]

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[1]   Cf. Chesbrough, H. W. (2003): Open Innovation. The New Imperative for Creating and Profiting from Technology, Boston: Harvard Business School Press.

[2]   Cf. Raymond, E. (1997): The cathedral and the bazaar. Free distribution.

[3]   An example of this is openmaterials.org. The main specific characteristic of a project is that it has a beginning and an end, once the objective of the project has been achieved.

B) Virtual Open Communities

By VOC's we refer to communities integrated by experts around the world to share knowledge and ideas. They normally have a common topic, but not necessary a goal or challenge to solve. They organize themselves around some forums or wikis for giving support each other.[4]

In short, this new model means that lot of value can be created thanks to universal talent. The possible uses of the outputs of these kinds of collaborative works still have to be further studied and this note suggests a framework to apply it for regional development. The philosophy behind this approach is to try to derive knowledge and experience from further activities and industries. In definitive, it is expected to help to:

> Analyze how Virtual Open Projects and Communities (VOP&C) can generate a positive impact on regional development
> Understand the dynamics to provide a useful framework to systematize the use and exploitation of VOP&C on any region

2.   Understanding VOP&C's and their dynamics

A review of the literature shows a large effort trying to structure this new way of doing things based on collaboration enabled mainly by Internet communications. Both research communities and practitioners are fascinated by the outstanding results VOP&C's are bringing to the world. Gary Hammel points to this new ways of self-organizing movements to be a key for new ways of producing in his book entitled "The future of management" (2007).[5]

Wikipedia and Linux can be seen, as most famous VOP&CS. Wikipedia is a project, "to make an encyclopaedia"; and there is also a huge community of contributors (potentially any one of us). There are some concepts that can be introduced to clarify a little bit what we refer with VOP&C's and its main characteristics that make them unique. Referring to Albors and Ramos (2008)[6], we can list some of the characteristics make them special:

- Purpose. Normally they have a clear vision, strategy and values. The driver for keeping it running if a shared passion.

- Economy. Open normally is associated to free. However, there are business models running around VOP&Cs (i.e. Linux distribution companies which sell their support services). But main open projects and the way open communities use to run are for free. So it exists what is called a "gift giving economy" sustained by recognition and potential monetization of expertise.[7]

- Production. At knowledge main capacities of VOP&Cs are based on talent and a very efficient way of working.

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[4]   An example of a VOC can be openentrepreneurship.com.

[5]   Hamel, G. (2007): "The future of management". Harvard Business School Press.

[6]   Albors, J; Ramos, J.C. (2008): New learning network paradigms: Communities of objectives, crowdsourcing, wikis and open source. Elsevier.

[7]   Cf. notably Cheal, D. (1988): The Gift Economy. Routledge, London and Bergquist, M; Ljungberg, J. (2001): The power of gifts: organizing social relationships in open source communities. Info Systems J (2001) 11, 305–320.

- Members only need to have talent (no machinery or facilities). So it is possible to participate by home office. Lot of VOP&C's members contribute at their leisure time, having another activity for a living.

- Very well structured and spilled work. As it happens in software that can be spilled into small modules and thousand "eyes" for reviewing and improving. This is something applicable to other things it doesn't matter if it is art, innovation or

- Structure and Organization. VOP&Cs are organized in a mix way between the ideas of Bazaar and Cathedral (in the meaning of Raymond, 1997).

  - Democracy. It is based on a democratic system where all members participate

  - Meritosism. The way people are promoted to get responsibilities in the community is based on a collaborative hierarchy. Leaders are elected by a positive meritocracy, which means that progression is mainly based on value added by an individual to the community or project. Only active participants are able to exercise coordination, control and decision-making.

- Enabling Infrastructures. Internet global access has enabled a new way of collaborative work.

All these features may provide a kind of "hyper-efficient" system.

People assuming different roles integrate Internet communities. Some of them are very active, contributing continuously, but there are others contributing in less degree, and many others only observe or get pieces of what is going on the community. These last ones are called lurkers (according to Nielsen, 2006[8]).

We call "pull" to the activity of feeding the community, in definitive, providing value to it. It can be in form of a post with contents, solving a problem, developing a piece of software, sharing a presentation or video, or whatever other form of sharing contents. The "push" action refers to absorbing value from the project repository (i.e. a wiki or portal) or expert members of the community. It means, learning something new, using a shared material to develop an activity for the individual interest. It doesn't matter if it is for its particular purpose or as a professional one.

Following figure represents both activities over two dimensions. Level of reality is represented on vertical axis: real, face-to-face; or virtual. Horizontal axis shows the geographical impact once it is applied: global or local.

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[8] Cf. Nielsen, J. (2006): Participation Inequality: Encouraging More Users to Contribute, www.Useit.com.
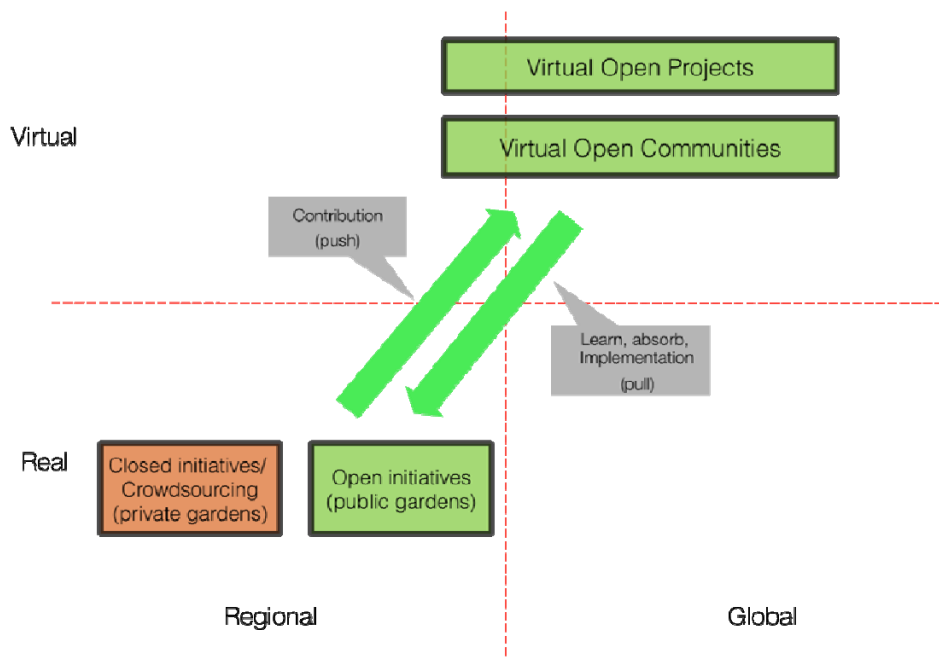
Virtual Open Projects

Virtual Open Communities

Virtual

Contribution
(push)

Learn, absorb,
Implementation
(pull)

Real

Closed initiatives/
Crowdsourcing
(private gardens)

Open initiatives
(public gardens)

Regional

Global

Figure 1. VOP&Cs' dynamics

Crowdsourcing (Howe, 2006[9]), collaborative consumption (Bostman and Rogers, 2010[10]), community based design etc. are terms created to explain new realities. We will only try to group them around the final beneficiaries of the results. Thus, we differentiate two main groups:

A) Private gardens

By this we refer to any kind of virtual project or community, which uses universal talent to solve a problem on the benefit of an individual or company normally paying for this. In a metaphorical way, someone has a problem at his garden and asks for help to his neighbours. They help him, but when the garden is fixed, the only one who enjoys it is his owner. For instance, the term "crowdsourcing" is defined by Howe (2006) as: *"the act of outsourcing tasks, traditionally performed by an employe*e or contractor, to an undefined, large group of people or community, through an open call".* An example of this is Innocentive, a portal for publishing challenges or problems a company has to get solutions from global talent around the world.

B) Public gardens

A second way of working is what we refer as VOP&Cs. In this case, there is a goal or problem to be solved. People and resources are organized to solve it and beneficiaries are everybody, even if it isn't a member. But normally no one can use in an exclusive way the results of the VOP&C, since it is protected to be available for anyone. As referred previously, Wikipedia is a clear example. But there are many others like MIT open courseware, a case where an institution like MIT gives open access to all its material.

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[9]   Howe, J. (2006): Wired Magazine. April 2006.
[10] Cf. Botsman, R; Rogers, R. (2010): What's Mine Is Yours: The Rise of Collaborative Consumption. Harper Business.

3.   Using VOP&Cs for regional development: a proposal

Some regional initiatives exist trying to get benefit of new reality of Internet, accessing universal talent and ideas. The foreseen team has made some first studies on ones (i.e. Silicon Valley with its popular Crunch Base website) and even has participated in others (i.e. Castellon, a ceramic industrial area; Espoo region in Finland). In some metropolitan areas wiki-cities are the virtual places where citizens and individuals from everywhere can say something about it or suggest ideas for improving it. Furthermore, some real experiences can be observed as the one started at Aalto University Camp for Societal Innovation focused on the Espoo (Finland) case study. It has launched a wiki for asking for ideas about improving its innovation activity. And finally, there is a practical case in a city of Spain, Vila-real: a region that wants to re-invent itself through societal innovation.

In mid and long term, VOP&Cs interactions constitute a new competitive resource for regions to use. The role of public administrations and institutions in this ambit of VOP&Cs is limited to promote the enablers that will allow those communities to be accessed, used and exploded by local agents to make its day-to-day work more efficient. It is a new channel and tool for local players to ask for support, ideas, existing methods and studies, etc. to be more competitive and create local wealth and improve well-being.

In this respect, the field of entrepreneurship seems to be promising and could constitute a first experience for driving future studies on how global talent enhances innovation capacity of a region.[11] Considering the opportunity of VOP&Cs for regional development, a project could be launched associating several regions in different European countries (e.g. France, Germany and Spain) under the form of a practical experience. The scope of this project could be:

- To analyze the case of entrepreneurial VOP&Cs and how they are used, fed and explored in a local environment. Fieldwork would assess how entrepreneurs and investors use and benefit from VOP&Cs on entrepreneurship.

- To perform a deep comparative research. This would allow the team to identify best practices among regions under study. Then a framework on using and exploiting VOP&Cs could be suggested based on evidences and finings.

- To measure the impact of entrepreneurial VOP&Cs in different regions. In particular, two set of indicators would be needed, the first one to measure how entrepreneurial activity can be increased through VOP&Cs, the second one dealing with real wealth impact.

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[11] A previous desktop research has been started and existing experiences as Open Entrepreneurship (Sweden) and Crunch Base (Silicon Valley, USA) have been checked.