ESF Exploratory Workshop on

Towards a Virtual Institute for the Measurement, Evaluation and Management of Open Online Communities

Brest (France), 5-7 February 2013

Convened by:
Nicolas JULLIEN [1], Felipe ORTEGA [2]
and Jesús GONZÁLEZ-BARAHONA [3]

SCIENTIFIC REPORT

Co-sponsored by

[1] *LUSSI & Marsouin, Institut Mines-Télécom, Télécom Bretagne Brest, France*
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Executive Summary

Open online communities are reshaping various information-based industries, and assessing their managers requires a revised understanding of voluntary communities, supported by innovative measures. In this area, Europe shares the lead with the US, with strong leading area (SNA, network economics, efficient information representation), but lacks of coordination between researchers and labs. The juxtaposition of emerging data resources, computational tools and interfaces, a rich foundation of the relevant social science concepts and theory, and a practically important phenomena makes open online communities an area that is well positioned for transformative infrastructure investment.

The aim of the ESF-funded workshop was to enable a small group of researchers to start sharing knowledge, research methodologies and complementary approaches. It was the first step of an interdisciplinary and holistic approach for the study of these communities, articulated, in the mid-term, by a Horizon 2020 EU Framework Program proposal, and in the short term, by a COST proposal due in June 2013.

The workshop has been a milestone in a three-steps process:

- asking people, *before the workshop*, to express the reasons why they want/need to share and collaborate with other researchers on the study of open-online communities,

- making people know each other and exchange on the key reasons for settling such network of research (what the exact boundaries of the object of study 'open online communities' are, what the expected benefits of such regrouping/network are on this study and how this can work effectively), which was the main objective of the workshop in Brest,

- the redaction of an agenda for the group, aiming at being submitted as a COST proposal (multi-disciplinary network) in June.

As a result of the workshop, we propose this definition for open online communities, based on [Wikisym 2012 work](), but adapted on the definition of "self-organizing", to stress the fact that people clearly do have to adapt to the norms and practices of online communities even if norms and practices emerge and evolve rather than being imposed or given a priori:

"Open collaboration is egalitarian (*everyone can join, no principled or artificial barriers to participation exist*), meritocratic (*decisions and status are merit-based rather than imposed*) and self-organizing (*processes adapt to project community rather than community adapts to pre-defined processes*)".

The second result of the workshop is the clarification of the main goals of the network to which all the participants of the workshop agreed to participate, and which can be summarized as follows:

- To leverage existing resources and ongoing initiatives for the study of open online communities in different scientific disciplines, creating **a common framework** to integrate contributions from several areas. In particular, this will lead to reconcile lines of study **from technical and social sciences** in order to identify complementary results, models and conclusions that can address a broader set of application domains.

- To develop and nurture a **virtual research institute** for the study of open online communities, including research artefacts that have proven successful based on empirical evidence:

- a unified roadmap and research agenda for the study of open online communities, theories, models, common frameworks, and methods;

- research algorithms, tools and resources,

- data sets, metarepositories and federated data sources,

- practical advice and best practices.

- To create and maintain a **common directory of openly accessible data** sets describing open online communities in different contexts. Individual entries for these data sets will be self-descriptive, providing an accompanying factsheet, links to their location, related tools and studies to illustrate their use.

- To serve as a **central source of information** about research and practice on open online communities (with special emphasis on security and ethical aspects), making it easier for any potential stakeholders and society at large to better understand this form of open collaboration.

A preliminary identification of application domains that can benefit from the creation of this new European research network includes:

- Peer production of content and knowledge across different domains (software engineering, multimedia content production and classification, encyclopedic content, etc).

- Science and research organization and practice (technical sciences, social sciences, health sciences, etc.)

- Education and learning (OER, MOOC, etc.)

- Business organization and knowledge management.

- Open data, open government, evidence-based policymaking.

- Document management, information retrieval and archival, content curation, preservation of cultural heritage.

- Participatory democracy, citizen activism, citizen science.

- Journalism and news media.

Scientific content of the event and Assessment of the results.

[Motivating Problem/Opportunity]

Open online communities are increasingly important and potentially transformative in areas such as technology development, knowledge production, education and learning, innovation, health, and civic life. Yet in spite of their growing importance many fundamental questions about the measurement, management, and evaluation of open online communities remain unanswered.

Furthermore, because the communities are online, members leave many visible traces of their activities, providing novel repositories from which to collect and analyze detailed data about the communities. Specific data mining instruments and means to store and process the Big Data resulting have been developed for this purpose. Historically, advances in instrumentation have driven theoretical and conceptual breakthroughs.

The juxtaposition of emerging data resources, computational tools and interfaces, a rich foundation of the relevant social science concepts and theory, and a practically important phenomena makes open online communities an area that is well positioned for transformative infrastructure investment.
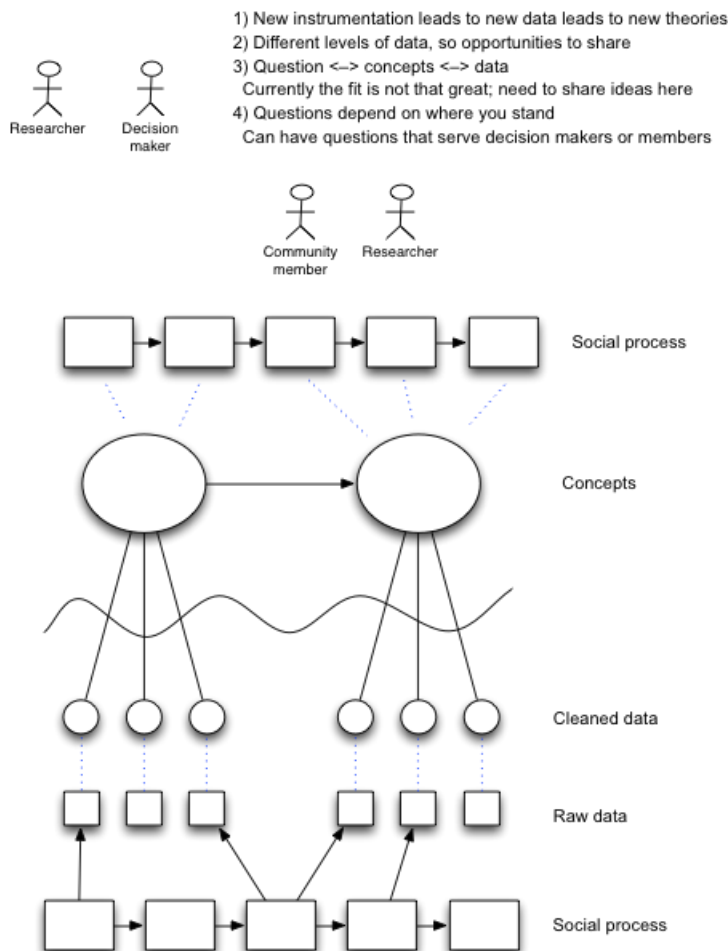

Illustration 1: Motivation for multi-level multi-disciplinary analyzis of Open-online communities (Kevin Crowston for ESF Workshop).

[Common Constraints/Challenges/Need for Virtual Institute]

Open online communities are social phenomena (hence social science theories and research from a variety of disciplines are relevant and can be advanced by their study). However they are also necessarily technology intensive – consideration of information and communication technology is central to the design, functioning, and study of open online communities. Improved understanding of such communities will drive the design of better collaboration tools to better support their activities. Furthermore, because of the nature of online activities, the opportunity to instrument, capture, and analyze high-volumes of rich data in service of research are significant -- but doing so presents particular computational challenges as well.

Fragmented Community of Researchers – Diverse expertise, approaches, resources, and capabilities are needed to advance understanding of the measurement, management, and evaluation of open online communities -- but those necessarily cut across disciplinary, institutional, and international boundaries.

Researchers are faced with a significant challenges -- to bring together social science, computer science, tool development, and data science. Solutions to this challenge have been largely idiosyncratic to particular research groups -- with limited sharing of knowledge, solutions, tools, and data resources (often bounded by traditional disciplinary boundaries). While this approach has resulted in some advances, it delays progress, increases resource requirements, hinders collaboration, and constraints participation and ultimately limits the impact of the current studies of this critical phenomena.

[Proposed Solution – An International Virtual Institute]

To address these issues we proposed to develop and run an international virtual institute focused on the measurement, management, and evaluation of open online communities -- the Online Community International Virtual Institute (OCIVI).

[Institute Goals/Objectives]

The purpose of OCIVI is to realize the potential of open, online communities by:

- Advancing high-impact social science and computer science research relevant to open, online communities **(Intellectual Impact)** [assessed by social science, information science, and computer science (basic sciences) publications/citations of work supported by OCIVI]

- Advancing state-of-the-practice in design, management, and evaluation of open online communities **(Translational objective)** [assessed by domain specific (applied sciences) publication/citation of work supported by OCIVI]

- Accelerating the development of common data, technical, and intellectual resources and practices to support the study, management, and evaluation of open online communities **(Infrastructure objective)** [assessed by (a) existance of resources created by/with OCIVI and (b) use and citation of OCIVI supported resources.]

- OCIVI will impact the scientific community first, but also the whole society, at least at two level: the online communities by themselves, but also education of future IT professionals.

To achieve these objectives OCIVI will focuses on providing infrastructure and support for theory-oriented, computational enhanced, data based basic and applied research into open, online communities. It will be supported by a core group of international research labs and institutions which are both complementary and leaders in their respective domains regarding the study of online communities.

During the workshop, we defined the following organization for the Institute and for the observatory/analysis of the open online communities:
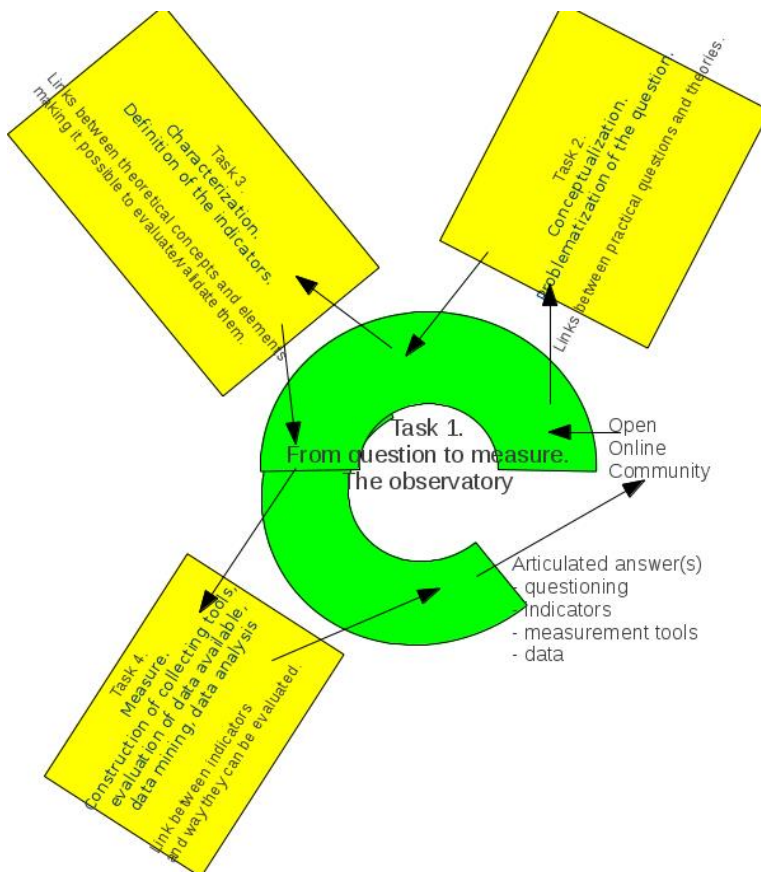
Task 3. Characterization. Definition of the indicators. Links between theoretical concepts and elements making it possible to evaluate/validate them.

Task 2. Conceptualization. Problematization of the question. Links between practical questions and theories.

Task 1. From question to measure. The observatory

Open Online Community

Articulated answer(s)
- questioning
- Indicators
- measurement tools
- data

Task 4. Measure. Construction of collecting tools, evaluation of data available, data mining, data analysis. Link between indicators and way they can be evaluated.

Illustration 2: Organization of the coordination of the different domaines of analyzing a OO community (Nicolas Jullien for ESF workshop)

Each of the areas/tasks identified above will be supported by a group or groups focused on completing those activities and achieving the relevant objectives. To help ensure the success of and significant impact from the project, the efforts will be supported by other working groups: user outreach and education, ethical and legal issues, governance and sustainability.

Creating OCIVI will accelerate advances, increase efficiency of resource use, promote collaboration, and expand access and participation opportunities in study of open online communities. By doing this OCIVI will help realize the full potential of open online communities to support and enhance technology development, knowledge production, education and learning, innovation, health, and civic life.

Research questions and interest in creating a virtual institute to study them.

These socio-technical projects (Bryant et al., 2005; Benker et Nissenbaum, 2006), where the tools used and the rules mediate and shape user activity around open collaborative "writings", can be seen as a community of practice (Hara et al., 2010), or even as an aggregation of multiple communities of practice (see, for instance, the analysis of the use of Wikipedia by sport fans by Ferriter, 2009). Extensive studies of the working practices of the Free Libre Open Source Software (FLOSS) projects and their associated online communities of developers and users have proven that open collaborative software development ecosystems are a rich source of insights into open community practice as well (references to the various volumes from the OSS/IFIP Working Group 2.13 series of conferences from 2006 to present).

The scientific questions regarding these communities can be split into three main themes:

1. **socio-economic background: motivations to contribute** (Nov, 2007), and **link between these motivation and the quality of the contribution** (Glott et al., 2010);

2. **editorial process or internal organization** (Besten et Dalle, 2008; Brandes et Lerner, 2008; Fréard et al., 2010; Kittur et al., 2007; Kittur et al., 2007; Ortega et Gonzalez Barahona, 2007) **and their impact on quality** (Viégas et al., 2007; Viégas et al., 2007; Okoli et Oh, 2007; Stvilia et al., 2008; Carillo et Okoli, 2011), with a majority of article in Information System (IS), Computer Mediated Communication and Computer Supported Cooperative Work;

3. **outcomes: quality and reliability of the production**, with a more communications in the domain of application of the community's production: for Wikipedia, library science (Denning et al., 2005; Magnus, 2006; Svoboda, 2006; Gorman, 2007; Waters, 2007; Fallis, 2008; Dede, 2008; Fiedler, 2008; Eijkman, 2008; Rector, 2008; Santana et Wood, 2009; West et Williamson, 2009; Royal et Kapila, 2009; Chen, 2010) and teaching orientation (Callis et al., 2009; Haigh, 2011), for FLOSS, computer science (earlier OSS references, Koch, 2011), for e-democracy, political science. As already said in the introduction, the flip side is that **outsiders from the community may want to evaluate the projects before investing** in, and community managers may also want to monitor their functioning[1], requiring elements and **metrics to define, measure and evaluate their quality and reliability**.

Of course, as mentioned by the authors quoted, the outcomes influence the inputs and the impacts have to be analyzed dynamically as these communities and their productions evolve over time. The **providers are given opportunities by their participation, in the community and outside (in the job market, for instance)**, leading them to potentially involve more themselves in the project; the users may also, by interacting with the system, become providers: for instance, regarding Wikipedia, Lih (2004) shows that articles cited by the press see the number of contributions to them increase.

Crowston et al. (2006), followed by Lee et al. (2009), may have proposed the more complete

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1	See the Open-source software assessment methodologies developed, most of the time, by service companies, on http://en.wikipedia.org/wiki/Open-source_software_assessment_methodologies.

framework and indicators to analyze the group production (they name "system creation"), and thus, the links between those three themes. Relying on DeLone et McLean (1992); DeLone et McLean (2002); DeLone et McLean (2003), they proposed indicators to link the concrete outputs (here article, in their case, open source software) to the user's satisfaction. In their study, they also refer to Hackman (1987), to show the importance, as an output, of taking into account the producers (or contributors) feedback, and the process of development to have a global view of the outputs of such open online projects. They finally rely on Seddon (1997) to extend Delone and McLean's model on the user side, with the concept of "perceived usefulness", which echoes psycho-sociological studies on the adoption of systems by users, such as Technology acceptance model by Davis (1989) and its extensions (Venkatesh et al., 2003).

More broadly, these communities and their functioning echo Elinor Ostrom's analysis of the "commons". Ostrom had studied "commons" for decades, and explained that they work because a group of people is working together to maintain something they all need and share, like a fishery, or a common meadow. But these "commons" referred to a closed group, with quite strong borders (geographical borders for instance).
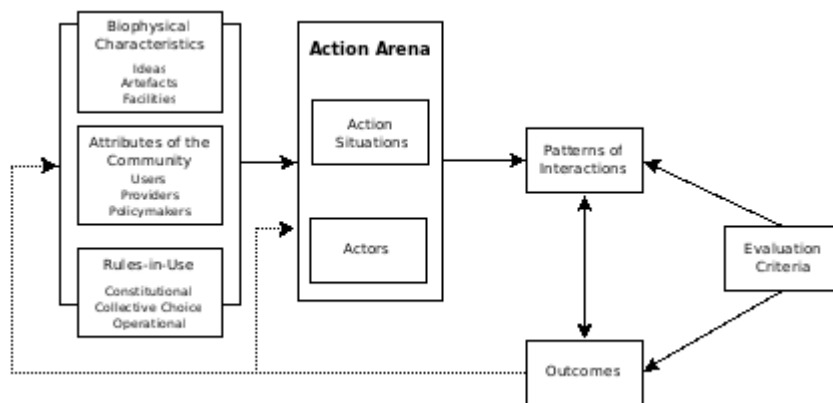

Illustration 3: Framework to analyse knowledge commons, in Hess, Charlotte and Ostrom, Elinor, "Introduction: An Overview of the Knowledge Commons" (2006), 3--26

Being online makes these borders mostly irrelevant (but the production is also less vulnerable). In other word, in online commons, the barrier to participation is maybe low (although the level of contribution may be constrained by expertise and knowledge required to effectively contribute, e.g. in software development), and the output, the production of the communities is available to all (see, for instance, the definition of free cultural works). However, the global structure of these groups, the rules organizing those communities, are characterised by many similarities, and the framework to study those communities (see illustration), is more or less the same too: these projects are made possible by the aggregation of various skills (Arazy et al., 2011), motivations, and levels of involvement. They organize the collaboration between actors of divergent interests (O'Mahony et Bechky, 2008), creating some "coat-tailing systems" to integrate heterogeneity in terms of contributions and goals (Hemetsberger et Reinhardt, 2009).

This leads us to a more global scheme than Crowston et al's, where inputs are the providers as actors, the process the action arena (action situations) and mainly the patterns of interaction, and the outputs, the outcomes, view from different viewpoints, users, but also producers (providers in Hess and Ostrom's terminology), and which can be seen as an extension of the model proposed by Zhao et Bishop (2011, p. 720), and help to organize the research questions.
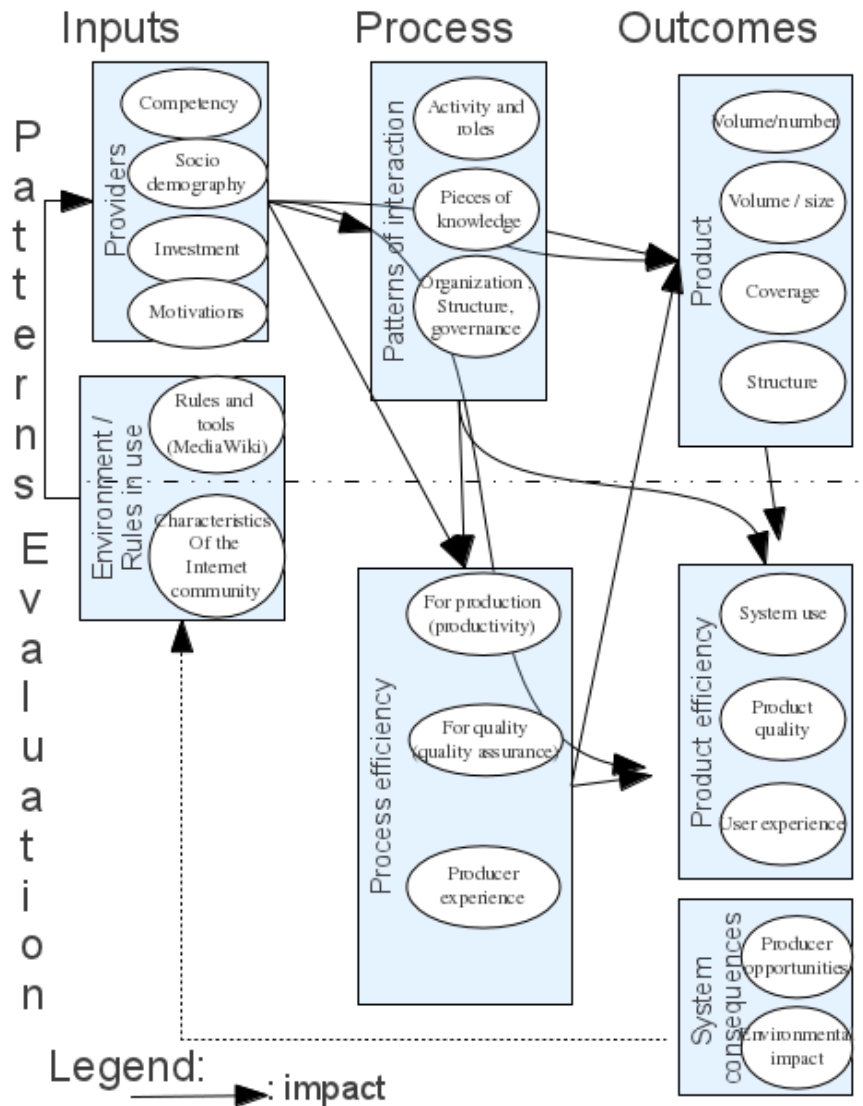

Illustration 4: Framework of the functioning of an open online community and (Nicolas Jullien, for the ESF Workshop)

This also helps to understand the necessity of our project: each items presented in the illustration has to be characterized and measured. The questions raised have to be linked to concepts and measured via the collection of data. Eventually, some measures will challenge the concepts and lead to new theories. Here are some example of the research questions and of the interest of a virtual institute to tackle them.

On the Inputs. The providers, why they participate.

The example of FLOSS shows that many of the open-source community participant are company employees, in a way representing and acting for their employer when participating in the

development of such communities. Such employees' "Career" becomes double: they must simultaneously manage the evolution of their participation in the community, and their professional career (Vicente, 2008).

The professional constrain may have an impact on developers commitment and motivation. Can we, for example, still speak of freedom (of expression, choice, contribution), which is "one of the foundations of the free software culture" (Scacchi, 2007) and a well-known incentive to participate, where individuals are paid for relaying, put into practice the strategy of their employer? Corporate behavior may contradict the value of the community and thus have an impact on their effectiveness as ideology has an influence on team effectiveness of free software (Stewart et Gosain, 2006). In summary, free software employees are likely to encounter a contradiction, a "tension" (in the sense of Thévenot, 2007) between their commitments vis-à-vis the community and vis-à-vis their employer.

How people deal with this tension is mainly in a blind spot in today's research, aside from Rolandsson et al.'s analysis of the difficulties for employees to switch from a proprietary development model to a more open one (2011).

Questions raised in terms of measure and data. **How will a SAVI help for that?**

To test the weight of each explanation of people's motivations to participate can be done via a qualitative and quantitative mixed approach, as the one Shah (2006) did: after case studies in open-source companies such as XWiki, RedHat, Mandriva, etc, a survey of the in-firm open-source developers and of their management would be conducted.

The SAVI network, because of the presence of international participants, is a tremendous opportunity to evaluate the cultural differences explaining firms and people's involvement in open online communities.

Questionnaire techniques will benefit from the SAVI network too.

According to the analysis presented here, regarding firm questionnaire a point that should particularly be studied, in addition to the reasons for the free time given by firms to their employees, if any, is the missions given by the firms to developers participating to a community: are they hired to participate, are they hired because they participate, and do they have a specific goal (to reach a certain level, to take in charge certain part of the project), or participation is the only thing required? Regarding the employees, personnel economics theories suggest that evaluating the value of the free time as a perk, i.e. measuring the social, cultural capital employees gain participating in those communities can be breakthrough. As pointed out by Lazear et Oyer (2013), the complementarities and redundancies between the different dimensions of community involvement as a perk make it very difficult to measure this perk. If such models are few developed in the literature, both firms' strategy regarding FLOSS involvement and employees' participation to these communities are multi-factors, suggesting that traditional econometrics measure may not be appropriate.

The SAVI project which involves people from social sciences but also from decision support system, may help to design innovative measure techniques, in that case, as, for instance, Meyer et Ponthière (2011), did: multiattribute hypothetical combinations of factors and Choquet integral-based multiattribute value theory may be used to elicite the ranking of preference.

The process(es), or the patterns of interaction.

Open online communities raise numerous challenges for the study of distributed collective activity and its relationships with its outcomes. The process(es) of collective activity itself can be analysed through several aspects: e.g. group composition, degree of collaboration, coordination, roles distributions, dynamics of the collective process, interpersonal processes. The outcomes themselves can be apprehended at several levels: a productive level (various characteristics of constructed epistemic knowledge such as completude, creativity…as well as its utility/usability, more user-oriented)), a collective level (e.g. team building, construction of rules and collective norms…), and a developmental level (learning and development of individuals). The relationship between process(es) and product(s) can be approached in terms of efficiency but also with the more complex integrative concept of "quality" to understand what links can be made between "good" process(es) with product(s) of quality.

The providers, their activity and roles (what they do).

Research questions concern:

1. Composition of the community in particular when engaged in specific collective action (e.g. developing a particular project in Wikipedia). Composition can be characterized by size, diversity, tenure, statutes. Research questions concern the extent to which some composition may be optimal with respect to quality (of process(s) and product(s)). For example, is there an optimal size for certain productive activity?

2. Coordination. With respect to productive activities in which the degree of interrelationship between subtasks is high (e.g. in design activity considered as ill-defined problems), the question of managing tasks interdependencies become crucial. Research questions concern: how do organisation structure and task/knowledge structure co-evolve? how do coordination mechanisms take place through communication, technology and organisation structures? To which extent and under which conditions are they optimal ?

3. Degree and zones of collaboration. Distributed collective activity in online communities may involve various degrees and zone of collaboration. Veritable collaboration can be considered as the joint elaboration of shared understanding of task/goals and joint foci of activities. At the other extreme, decoupled collective actions do not require such shared conceptual. Whereas decoupled actions do not require discussion between participants, close collaboration is revealed by (vivid and sometime conflictual) discussions focused on particular topics (and in particular zones of interaction, e.g. a particular discussion list). Often the issue is the confrontation and integration of point of views of various participants. Research questions concern: to which extent different degrees of collaboration are necessary? is close collaboration important to ensure quality? does it reflect conflict and, in particular, constructive conflicts?

4. Roles and their distribution. (Social) roles have to be distinguished to the notion of statutes. Whereas the status reflects the rights and duties of participants according to rules defined in the community, roles reflect their real activity. they can be declined along various dimensions, mainly, epistemic (types of knowledge evoked/produced by one participant) and dialogical (communicative functions -e.g. informative, argumentative, regulative- of one participant's actions). Therefore another way to understand the collective activity is to analyse the emergent roles and their distribution. Research

questions concern: relationship between roles and statutes (and participants trajectories); balance and mutual compensation of roles; boundary roles; to which extent particular roles distribution (and not only group composition as referred to above) may be optimal with respect to quality (of process(s) and product(s))?

5. Dynamics. The process can be characterized by its dynamics. Research questions concern: how productive, constructive, and inter-relational processes co-evolve and are there mutual influences between them? What are the particular dynamics of roles evolution and distribution? and finally are there particular dynamics linked to quality and sustainability of communities?

In the context of creative industries and workers (Broadway musicals and university research teams), Uzzi et Spiro (2005); Uzzi (2008) proved that for a creative group to be successful, it needs to fine tune the level of newcomers, for fresh ideas, in an already constituted group (for trust and common sharing, or "cohesion"). They show that there is what they call a "Q"-level, "bliss point" in the ratio between those newcomers and experimented people (more is too much, less is too few) for these creative teams to be the most successful. Interestingly, this seems to confirm also certain results of personnel economics studies on team working, which show that heterogeneous teams are more productive than heterogeneous isolated workers, in the case of low level skill workers (Mas et Moretti, 2009; Hamilton et al., 2003).

What are the questions raised in terms of measure and data? How will a SAVI help to answer them?

The availability of the Dump files for Wikipedia, of the CVS files for FLOSS projects (from Sourceforge, for instance), makes it possible to **do longitudinal studies to evaluate the links developed between people working on the same pieces of knowledge** (article/files or sub projects), thus to measure more precisely the size of the teams and the level of connection between the members. This requires **capacities in data extraction, data mining and especially social network analysis.**

The second point concerns cooperative work studies and discussion/conflicts. Those discussion/interaction are also, for a part, made available in the data (discussion lists, forum, etc.) Data and Language automated treatment

Only a SAVI may allow to conduct this kind of breakthrough researches, because of it **material infrastructure, but also because it makes it possible for researchers from social sciences, data mining and computer sciences to interact.**

The organization, structure, and governance of the project.

Studying these community may help us to better understand how groups work, how (virtual) collaboration and leadership can succeed, something of growing importance for firms (Crowston et al., 2010; Hernandez, 2012). For instance, it seems to be a two level-leadership in Wikipedia: leaders focused on project management, content-based, where discussion and coordination are closely linked to the level of contribution to the article, with strong effects of socialization, and more global, project level managers, aiming at addressing the unresolved cases. We will try to investigate if this dichotomy is valid, and, to make it understandable even if a bit naïve, if content leaders are also content specialists when project management leaders are project managers

What are the questions raised in terms of measure and data? How will a SAVI help to answer them?

Still using the **Dumps/CVS data,** via longitudinal analysis, it is possible **to identify the trajectory of the people in the community**, the specialization in role, and to see if this specialization is somehow connected to their work. Once again, the SAVI network will **leverage the computer resources**, but also **the number of communities available** to perform such studies and provide with more robust results on the different kind of career within an open, online community.

Evaluation, points of view. The question of the quality of the Production.

Regarding the efficiency of the production, Stefan Koch proposed several studies on the measure of the efficiency of FLOSS communities, and defines "efficiency" the capacity of turning contributors into lines of codes, but also into bug fixing, for instance (Koch, 2008, b). As this list indicates, something he pointed out, the outcomes of a community have to be measured on several direction, without a clear view of this importance of each factor, leading him to propose to use Data Envelopment Analysis techniques to estimate which projects are "efficient" without assuming a form for the function of production. Crowston, Ortega, Jullien (2013) transferred this technique to Wikipedia studies.

Regarding these works, improvements have to be done, including outputs along additional dimensions, considering factors such as production size and quality.

What are the questions raised in terms of measure and data? How will a SAVI help to answer them?

Taking the example of Wikipedia and quality may make the interest of a SAVI more explicit: The most comprehensive attempt to develop criteria to judge article quality on Wikipedia may be the ones by Stvilia et al. (2008) and Lewandowski et Spree (2011). Stvilia et al. (2008) looked at the information quality process both in the organization (number of editors, of edits, ratio between edits in talk pages and in content pages, etc.), and in people's interaction (via a content analysis of a set of feature articles' talk pages). Lewandowski et Spree (2011) extend these criteria to 13 criteria (see p. 126 of their work for the complete list), drawn from data analysis (length of the article, existence of references, etc.) but also human (expert) evaluation of the quality. They show a correlation between these criteria and the rank in search engine, with a good correlation but a strong dispersion.

In both cases, the automation of the methodology to a whole project, not to say to different languages, is undone yet. There are efforts to automatically analyze the articles, but these are currently not yet enough effective to be of use (Fong et Biuk-Aghai, 2010). Indeed, even the fact that an article is a FA (feature article) is not coded in the projects' data base, and instead has to be extracted revision by revision from the text of each article in the projects' dump.

SAVI will help to collect and process the data in another order of magnitude than the isolated projects, but also propose comparisons between different systems/groups of production.

Final programme

Tuesday 5 February 2013

Afternoon/evening *Arrival*

Dinner

Wednesday 6 February 2013

Welcome Coffee

09.00-09.20 **Welcome by Convenors**

Nicolas Jullien (Télécom Bretagne, Brest, France), and **Felipe Ortega**

(ETSIT, Universidad Rey Juan Carlos, Mostoles, Spain)

09.20-09.40 **Presentation of the European Science Foundation (ESF)**

Stefan Jähnichen (Science Review Group for Physical and Engineering

Sciences)

09.40-11.40 **Morning Session: Measuring open online communities:**

quantitative and qualitative approaches

Panel presentation 1, followed by discussion

Panel presentation 2 followed by discussion

Panel presentations 3 followed by discussion

11.40-13.00 *Lunch*

13.00-15.00 **Afternoon Session: Evaluating the evolution and sustainability of**

open online communities

Panel presentation 1, followed by discussion

Panel presentation 2 followed by discussion

Panel presentations 3 followed by discussion

15.00-15.30 *Coffee break*

15.30-17.30 **Small group discussions**

Participants will be dispatched into 3 groups to discuss the

*following issues***:**

• **Tools that would help to estimate the communities**

• **Group performance and Management of open online**

communities

• **Discussion and redaction of a synthesis**

19.30 *Dinner*

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Thursday 7 February 2013

09.00-11.00 **Morning Session:**

Rapporteurs from each of the 3 groups will report on the previous

day's group work

this will be followed by a summary discussion

11.00-11.30 *Coffee break*

11:30-12:30 **Next steps to a European project. Global discussion of the main**

scientific questions and of the goals of such a project

12.30-14.00 *Lunch*

14.00-15.30 **Afternoon Session: Towards a unified framework for**

measurement, evaluation and management of open online

communities

Participants will be dispatched into small groups to discuss the

agenda of the research questions

This will be followed by a summary discussion

15.30-15.45 *Coffee break*

15.45-17.00 **discussion on follow-up activities/networking/collaboration**

17.00 *End of Workshop*

Dinner

Friday 8 February 2013

Morning - Departure

Final list of participants

Finn Aarup Nielsen	Technical Univ. of Denmark	Denmark
Françoise Détienne	Télécom Paristech	France
Cécile Bothorel	LUSSI, Télécom Bretagne	France
Philippe Lenca	LUSSI, Télécom Bretagne	France
Nicolas Jullien	LUSSI, Télécom Bretagne	France
Juan David Cruz-Gomez	LUSSI, Télécom Bretagne	France
Ann Barcomb	Friedrich-Alexander University	Germany
Katrin Weller	GESIS, Leibniz Institute for the Social Sciences	Germany
Stefan Jähnichen	*Berlin Technical University, ESF Representative*	*Germany*
Jodi Schneider	DERI, National University of Ireland	Ireland
Klaas-Jan Stol	LERO, The Irish Software Engineering Research Centre	Ireland
Paolo Massa	SoNet group, Bruno Kessler Foundation	Italy
Danica M. Radovanovic	Center for Digital Humanities, Belgrade	Serbia
Felipe Ortega	Dept. of Statistics and Operational Investigation, URJC	Spain
David Laniado	Barcelona Media	Spain
Claudia Hauff	Information Systems group, Delft University of Technology	The Netherlands
Taha Yasseri	Oxford Internet Institute	UK
Athina Karatzogianni	University of Hull	UK
Cornelia Boldyreff	School of Architecture, Computing and Engineering, University of East London	UK
Kevin Crowston	NSF, Washington D.C.	USA
Brian Butler	iSchool, University of Maryland	USA

Pr. Jesús M. González Barahona could not attend for personal reasons.

Statistical information

Nine countries were represented for a total of 20 participants (not counting ESF representative), the ratio between female and male participants being 9 to 11.

Country	N° of Participants
Denmark	1
France	5
Germany	2
Ireland	2
Italy	1
Serbia	1
Spain	2
The Netherlands	1
UK	3
USA	2