



At a glance

SEQUOIA:

Socio-Economic Impact Assessment for Research Projects.

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Editorial

Welcome to the SEQUOIA Newsletter!

We are happy to share with you the activities of the SEQUOIA project thus far.

The mission of the SEQUOIA Support Action (SA) is to maximise the socio-economic impact of Software as a Service (SaaS) and Internet of Services (IoS) research projects. And we are in the process of defining a systematic socio-economic framework in support of exploitation practices which can be advantageously pursued by projects to assess their socio-economic impact.

The first year of the SA has seen us revise the focus of our questionnaires to address Call 5 projects from the onset as opposed to Call 1 projects as was our initial plan. But this approach enables us to optimise the feedback harvested and in turn better serve the Call 5 projects and fine-tune the ultimate methodology that we can offer after the lifetime of the project.

We hope you find this newsletter useful and look forward to a second successful year in the SEQUOIA project.

Paolo Dini, Coordinator



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Background

Let's recap first of all on the background to the SEQUOIA project, what it seeks to achieve and how.

Today's socio-economic circumstances have put increased pressure on funding bodies to demonstrate that resources are spent in the most effective and efficient manner. Confirming this, the Europe 2020 Flagship Initiative 'Innovation Union'¹ suggests reforms in innovation systems in order "to **get more value for money**". And the definition of an adequate research evaluation model is on national political agendas both inside and outside Europe. But better evaluation methods are needed to identify what works and what does not, and why, as well as what could and should be scaled up.

¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions SEC(2010) 1161

So, what can research projects do to contribute to European priorities such as promoting socio-economic growth?

Challenge

Today, research projects need to engage more with objectives that go beyond technological achievements. According to the ICT work programme 2009-2010, technologies developed under Challenge 1 (Pervasive and Trustworthy Network and Service Infrastructures) are expected to be tailored to **meet key societal and economic needs**. In addition, the socio-economic implications of new technological solutions need to be assessed at an early stage.

So, which are the pros and cons of recent research investments towards the Internet of Services? How can investments be addressed more effectively? How can their impact be maximised?

SEQUOIA at a glance

Co-funded by the European Commission under Unit D3 ‘Software & Service Architectures and Infrastructures’, SEQUOIA aims to translate these generic statements into more specific socio-economic objectives by:

- performing an assessment of the socio-economic impact of the research projects in the area of Software as a Service and Internet of Services (SaaS and IoS)
- developing a self-assessment methodology that on-going and future research projects will be able to adopt and apply on their own after the end of this support action
- developing a set of recommendations for how self-monitoring mechanisms

that can be adopted in order to facilitate the self-assessment process and enable the impact of SaaS/IoS to be optimised in future calls.

Through its **methodology** SEQUOIA seeks to help projects focus more on the creation of value and aims to give them qualitative and quantitative information to help them become more aware of their social and economic innovation capabilities.

In this way, new projects will be able to **self-evaluate** their potential output in terms of socio-economic benefits, and possibly re-orient their activities in order to improve such impact.

The Methodology

Starting from the experience of the ERINA² study and FASSBINDER³ project, SEQUOIA uses a mixture of the traditional techniques such as Cost Benefit Analysis and Multi-Criteria Methods revised and adapted to the SaaS and IoS research domain.

The SEQUOIA methodology identifies four steps:

- Step 0: The choice of an appropriate time frame
- Step 1: Identification of the project type, scope and its stakeholders
- Step 2: Mapping the outputs, the outcomes and the impacts (in qualitative terms)
- Step 3: Perform parallel multiple analyses for each project.

The performance of **parallel multiple analyses** is an important step by which projects are able to evaluate not only the monetary and monetisable costs and benefits but also develop **qualitative** indexes. These are used to assess benefits on society which cannot be evaluated in



² www.erinastudy.eu

³ www.fassbinder-project.eu

quantitative terms but are still fundamental elements especially in a research environment.

What does the SEQUOIA methodology offer?

- an analysis of the results of the projects considering only the development process and the potential future exploitation (ex-post analysis);
- an analysis of the outputs of the projects in comparison with a baseline case (improvement from the ex-ante scenario (baseline) towards the ex-post scenario (exploitation of project outputs));
- an analysis of the societal impacts of the projects (analysis of the outcome) in qualitative terms. The reliance on qualitative analysis is partly due to the difficulty of quantifying impacts of projects before the projects have run their course.

SEQUOIA today and next steps

SEQUOIA is at the moment **studying 47 research projects** co-funded under the European Commission Unit ‘Software & Service Architectures and Infrastructures’ and is **assessing their socio-economic impact** by applying its methodology. Thanks to this exercise by the end of the project a self-assessment methodology will be ready for adoption for on-going and future research projects.

Focus Groups

SEQUOIA focus groups in February

The **first SEQUOIA focus groups** took place on 14th and 16th of February. The ACSI, FITTEST, SOCIOS, VISION CLOUD, HOLA, DIVA, Q-IMPRESS, S-CUBE, OMELETTE, WEBINOS projects actively participated in the focus groups giving SEQUOIA the opportunity to learn more about their needs and expectations regarding socio-economic impact assessment.

During the discussion the projects highlighted the importance of putting in place an assessment methodology from the beginning of the projects. The need was expressed to identify appropriate

tools as impact assessment of research projects is perceived as difficult to perform: benefits are not always economic and may be difficult to quantify, more variables need to be taken into consideration and so forth.

In general the projects expect to receive help from SEQUOIA in predicting the potential for market penetration and understanding and evaluating the potential benefit of their research.

During the **second focus group** (16th February) the need for tools to assess the socio-economic impact of research projects became very clear. The focus group involved the participation of Call 1 projects (DIVA, Q-IMPRESS, S-CUBE) and Call 5 projects (OMELETTE, WEBINOS), with different expectations. Call 1 project, being near to their project end, expressed the need for a framework to support impact assessment after the end of the funded period, while Call 5 projects also highlighted the importance to put in place an assessment methodology since the beginning of the project lifetime.

The **third focus group**, on the 21st February, involved CHOREOS, I2WEB, OPTIMIS, REMICS (Call 5). Most of these projects are counting on SEQUOIA to help them develop a long-term assessment process.

On 22nd February the **fourth SEQUOIA focus group** took place. The session focused mainly on the “social impacts” of the projects. This is one of the most difficult aspects of impact assessment for ICT research projects. The projects who participated in the focus group, IRMOS, OPEN, PERSIST, SHAPE (Call 1) and SOCIETIES, SERENOA (Call 5), entered into an interesting discussion on how research projects often do not provide direct solutions for end-users or businesses in some specific sectors but may be considered as 'enablers of innovative solutions' in line with the nature of their research. The effective impact at a social level will depend on which services will be created and developed further thanks to the projects' results.

Questionnaires

On 27th April SEQUOIA launched the **second questionnaire**. Through this questionnaire all cooperating projects are going to start assessing their project's potential for socio-economic impact. How? The SEQUOIA team will take the data provided by the collaborating projects and will build on it following the SEQUOIA methodology. The preliminary results will then be presented to the projects for validation. SEQUOIA focuses on

self-assessment and, in order to develop a methodological tool sensitive to projects' characteristics, it collects feedback from the collaborating projects during the whole assessment exercise.

Learn more about SEQUOIA

The SEQUOIA factsheet is now available on our website at <http://www.sequoiaproject.eu/>. To download it click [here](#) or click the Documents link in our main menu.

Collaboration

HOLA!

The SEQUOIA team participated in interactive brainstorming with the [HOLA!](#) project and other participants in order to work jointly on the identification of dissemination needs from the projects and determine concrete services to increase the impact of FP7 R&D in the area of Internet of Services so as to help the projects maximise the future use of knowledge and exploitation of results.

Awareness

Events

SEQUOIA at FIA

Representatives from the SEQUOIA team, Andrea Nicolai, (T6), Martino Maggio and Isabel Matranga (ENG), Francesco Bellini (Eurokleis) and Anne English (LSE) attended the [FIA event](#) in Budapest from the 17th to the 19th of May.

SEQUOIA was also represented at the RESERVOIR 'The Future of Cloud Computing, Strategies and Design' event - March 10, 2011, in Taormina by Martino Maggio and Isabel Matranga (ENG).

Paolo Dini attended FP8 Expert Group meeting, 'Services in the Future Internet' on 28th February.

3rd Party Coverage

SEQUOIA was featured in a recent NESSI newsletter (issue 17 - April 2011).

Flip book: <http://www.nessi-europe.com/?page=ebook>

PDF: http://www.nessi-europe.com/files/PDF-Newslt/NESSINewsletter16v7_WEB.pdf

We have also set up our presence on LinkedIn at:

http://www.linkedin.com/groups?about=&gid=3735732&trk=anet_ug_grppro

The Consortium

The SEQUOIA consortium is made up of four partners.



The London School of Economics and Political Science (LSE) is a specialist university with an international intake and a global reach. Its research and teaching span the full breadth of the social sciences, from economics, politics and law to sociology, anthropology, accounting and finance. Founded in 1895 by Beatrice and Sidney Webb, the School has an outstanding reputation for academic excellence. LSE has 16 Nobel prize winners.

Role in the project: LSE coordinates this Support Action and contributes to the dissemination activities, to the transfer of the assessment methodology and to the development of the Research Policy Recommendations.



Engineering Ingegneria Informatica S.p.A. (ENG) has been working in the IT market since 1980. It operates in all market segments – banks, insurance, industry, telecommunications, defense, healthcare, central and local public administration, utility and strategic consultancy – offering in each segment technological expertise to develop and manage complex information systems for more than 800 client companies. ENG is the holder of Engineering Group, composed of 12 companies covering, besides system and business integration and outsourcing, the following markets: logistics and security, training, consultancy, services and software development, technologies and products.

Role in the project: As one of the founding members of NESSI (Networked European Software & Services Initiative), ENG will act as facilitator to gather trends, positions, experiences and data related to the software and service market coming from the industrial partners involved in the NESSI initiative. ENG leads the activities on dissemination of the selected projects outputs. ENG also contributes to the activities related to the development of the SEQUOIA self assessment methodology, to

the dissemination and transfer of the assessment methodology and to the development of the Research Policy Recommendations.



T6 ECOSYSTEMS S.r.l. (T6 ECO) is a small consulting and research company with extensive experience in participating and coordinating national and international research and innovation projects. The T6 ECO mission is to study the development of the Information Society, promoting studies and innovative projects through the use of information and communication technologies. T6 ECO's main activities are: strategic consultancy to Public Administrations and private enterprises regarding innovation of process and use of ICT technologies, IT research on Digital Ecosystems and Distributed systems, and software technology transfer and business support for IT access and adoption by SMEs.

Role in the project: T6 ECO leads the activities related to the assessment of the socio-economic impact of the selected projects. T6 ECO also contributes to the Impact Assessment methodology development and to the drafting of policy recommendations. T6 ECO supports the dissemination activities.



Eurokleis S.r.l. (EK) is a SME set up with the aim of transforming the research experience of its founders into specialised strategic consultancy and research studies with the main focus on the use and the deployment of Information, Communication & Media Technologies. EK partners combine their academic background with numerous years of experience in various sectors and offer integrated services which cover all the different aspects involved. EK assists companies and institutions in taking the right decision by offering information and consultancy services concerning the latest developments in the world of technology innovation with special respect to ICT.

Role in the project: EK provides its knowledge to build the assessment model of the research activities providing the methodology and tools for carrying out the analysis among the projects in the field of IoS and SaaS.