TOSSAD

Scope

Europe, as a whole, has a stake in improving the usage of Free/Open Source Software (F/OSS) in all branches of business and public life.

Although there is a committed open source community in IT-strong countries of Europe, a lot more remains to be done. F/OSS communities throughout Europe can achieve better results through co-ordination of their research activities and programmes so as to reflect the current state-of-the-art.

In certain regions of Europe, mostly new Member States and candidate countries, F/OSS faces particular barriers because of various social, political, economical, and technical factors. On the other hand, F/OSS appears to be a big opportunity for such countries, by enabling rapid and affordable deployment of information technology, skills development, and cheaper solutions for education and public administrations. It could thus have a significant impact on the development of national and regional economies.

The tossad project aimed to improve the outcomes of the European F/OSS communities by supporting the coordination and networking of these communities throughout Europe.

This was achieved by means of state-of-the-art studies, national programme initiations, usability cases, curriculum development and the development of a collaborative information portal.

By conducting these actions on an international European level, with inclusion of the new Member States and candidate countries, tossad aimed at creating a momentum for a general acceptance and coordinated boost of F/OSS development.

Advances

tossad partners have specified 4 main activity topics, which had the potential of benefiting from joint studies:

- **Giving a clear picture of the current status of F/OSS related to technical and social barriers, opportunities and threats:** The outcome was presented in a report demonstrating the current status of F/OSS in Europe and explaining the main reasons for barriers against its wider deployment, and it was used as one of the main inputs for all other technical activities..
- **Building the basis to start up national programmes for improved usage of F/OSS:** The target group of this activity was the decision makers in the public sector and a guideline was proposed for F/OSS adoption in this sector.
- **Integrating current applied research activities in Europe in the field of usability and accessibility:** Usability was identified as an important activity topic, as it involves all users and developers of F/OSS and as it's one of the main criteria for wide adoption of

F/OSS. Partners have carried out joint studies for preparing guidelines for usability tests, have conducted these tests on selected subjects, and prepared a report summarizing the findings.

- **Developing and revising F/OSS training standards and help form the infrastructure and standardization of training documents:** High quality and well structured education is another prerequisite for adoption and success of F/OSS. Partners from education sector have revised F/OSS training standards, methods and curricula, and as a result of this study they have produced a report summarizing the findings and proposals for enhancements.

Positioning in global context

F/OSS community suffers from scattered efforts and lack of coordination between them. One of the main targets of the tossad project was to coordinate already ongoing activities in the selected key areas and create a momentum for future research activities. As F/OSS by nature is a global movement, many experts and actors from different parts of the world were involved in the technical activities of the project.

Contribution to standardization and interoperability issues

Standardization and interoperability are important driving forces for F/OSS. These two important issues have been analysed and discussed as part of all main technical activities of the project. tossad reports and guidelines present how adoption of F/OSS is tightly linked to standardization and interoperability, and how different stakeholders can benefit from these. Project results present roadmaps for establishing interoperable solutions using F/OSS.

Target users / sectors in business and society

All main technical activities of the project are aimed at different target groups as listed below:

- National programmes study: decision makers and managers
- F/OSS usability study: all types of software users and developers
- F/OSS training study: all F/OSS trainers and trainees

As a result tossad had a very good coverage of different user types and sectors. The analysis activities conducted during the project have involved these main user groups, and the proposed guidelines and roadmaps can be used by them.

Overall benefits for business and society

The overall benefits of the tossad project are tightly linked to the benefits of adoption of F/OSS. F/OSS enables rapid and affordable deployment of information technology, skills development, cheaper solutions for education and public administrations, and thus impacts the development of national and regional economies. All the reports and guidelines produced as a result of the main technical activities of the project present such benefits of F/OSS usage in public sector, private sector and education.

Examples of use

Under all main technical topics of the project, partners have conducted local case studies or linked the project activities to other projects' or F/OSS communities' activities. Below is a list of one example for each main activity area:

F/OSS National Programmes study of the project has been linked to the national programme study of the State Planning Organization of Turkey. Turkish experts have made use of tossad guidelines and roadmaps during the e-transformation project conducted by this organization.

One important usability test activity within the project has been conducted on OpenOffice software. The findings from this test activity have been shared with the OpenOffice developer community as inputs for future enhancements.

The Vocational Curriculum proposed as part of the F/OSS training study has been based on the training programme that has been actively used and developed in Sardinia region during the lifetime of tossad project.

Achievements

The main outcomes of the tossad project are the reports, guidelines, roadmaps produced within the aforementioned main activity areas. Below is a list of the main results:

- F/OSS national programmes, usability and training workshops
- F/OSS National Programme Start-up Roadmap report: The project published a proposal for a roadmap to ensure that governments exploit the benefits that F/OSS can offer more systematically both by using available F/OSS solutions and by contributing to further F/OSS development.
- Economical and Social Benefits of F/OSS report: This report serves to study the efficiency of F/OSS tools for both private and public organizations.
- Methodology implementation report and tutorial to build a Linux laboratory in a high school/K-12 and university environment: This report discusses the methodology for building a F/OSS laboratory for different kinds of F/OSS curriculum and gives a step-by-step tutorial for the implementation of the proposed approaches.
- Usability test results report: Partners have developed and executed a usability test in order to analyse the usability issues of open source office suite OpenOffice.org 2.0. The test methodology and results have been compiled in a test report.
- Current Status of F/OSS in the target countries report: The main aim of this study was to give a clear picture of the current status of F/OSS in the partner countries, focusing on the the technical and social barriers and opportunities. The report also includes some success stories that provide pointers for overcoming the barriers.
- Usability Guideline: The project consortium produced a guideline for achieving usability within geographically distributed development projects. Problems slowing down the F/OSS development and usability process were investigated, and recommendations for involving usability experts in development phase were provided.
- F/OSS Curriculum: This document reports on the tossad project's efforts towards the development of F/OSS Curricula suitable for delivery in a range of educational settings. The report discusses how to overcome shortage of workforce skilled in F/OSS and lack of components for basic knowledge on F/OSS in current curricula, and provides educational models for the study of F/OSS.
- F/OSS Adoption in public sector guideline: This report identifies roles public administrations can play in using and promoting F/OSS. It outlines several levels of adoption and a non-aggressive migration strategy for different platforms and scenarios.