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Addressing Industry Needs in OSS

Jan-Henrik Ziesing

In spite of its success, Open Source Software (OSS) is still fighting old prejudices and market difficulties. To address these points, Fraunhofer FOKUS is merging Qualipso project results with its proven lab-model on interoperability for public sector oriented Information Technologies (IT) industries. This approach will transfer the proven success and business models of interoperability labs to the OSS domain in the Berlin capital region.

Keywords: Industry Needs, Interoperability, Qualipso, OSS.

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1 Introduction

The use and development of OSS has increased significantly in recent years. Starting from research and community driven activities, a flourishing business segment has developed around OSS in recent years. While some OSS companies have by now became major market players (e.g. RedHat) and even some of the biggest software companies (e.g. IBM, Sun) have developed major proprietary OSS products and strategies, OSS has continued to be a strategy of choice for small and medium sized companies in particular. Due to the involvement of profit oriented companies, a growing professionalization can be seen in the development processes and also in terms of resource commitment and continuity [1][2][3].

Although there are already signs of the professionalization and industrialization of OSS development, there are still prejudices among users and problems for companies preventing an even wider usage and a broader variety of offers [4].

The TSB Innovationsagentur Berlin GmbH recently published a study on the Berlin OSS sector, providing an overview of the current market situation in the German capital region and demonstrating the problems and needs of companies and players in the region, both active and potential [4]. According to the study, the main reasons for the use of OSS quoted by the Berlin OSS industry are economical advantages, personal preferences, and quality reasons, all three of which are mentioned by over 60% of the industrial players, clearly predominating over organizational and image reasons, which are each quoted by fewer than 30% (see Figure 1).

The two most important barriers to OSS market success both mentioned by nearly 60% of the Berlin OSS players are insufficient political support and existing prejudices against OSS with regard to quality and sustainability (see Figure 1). Other, though less often, quoted barriers to OSS success are the difficulty of competing against dominant market players, missing business models and financing (just over 40%), as well as legal issues (nearly 25%). The Berlin OSS sector is further characterized on the one hand by a high demand for OSS solutions and a significant strength in OSS Research and Development (R&D), and on the other

hand by the fact that the Berlin OSS industry is highly dispersed and not sufficiently integrated in one major OSS network [4].

If we analyse these strength, weaknesses, opportunities and threats for the development of the OSS industry in the Berlin capital region, it is noticeable that the most important opportunities for the industry coincide with its weaknesses and the major strengths with its threats (see Figure 2). A reasonable strategy would thus involve addressing threats where feasible and strengthening the OSS industry especially where opportunities can be found.

For the Berlin region this especially involves addressing quality prejudices, strengthening value chain integration, and fostering knowledge transfer from R&D to industrial applications.

Improving the quality perception requires not only the use of sophisticated and quality-oriented development tools and processes, but also product testing and evaluation. Quality evaluations should then be made visible by marketing and communication measures. A major step towards enhancing knowledge transfer and value chain integration could be achieved by better networking in the Berlin capital region, which up to now has neither been following a clear strategy nor has it been sufficiently well established.

These steps necessary for strengthening the OSS Industry in the Berlin region are matched by the focus of the European project *Qualipso*, which has recently established OSS Competence Centres (CC) in Madrid (Spain), Sao Carlos (Brazil) and Berlin (Germany) and will establish further competence centres in Italy, China, Poland and France. These Qualipso CC will deliver services derived from Qualipso project results, which are dedicated to the improvement of OSS quality in all the different aspects comprising tools and best practices to achieve a professionalization and industrialization of the development process, product testing and labelling, interoperability meas-

Figure 1: Reasons for and Barriers to OSS Success in the Berlin Region.

ures, legal assessment, as well as certification and training. The second goal of Qualipso CC is to build up regional networks. The CC are then enabled to connect via the Qualipso Network and thus they can deliver networking, support, and are able to exchange best practices not only in their region but worldwide.

Fraunhofer FOKUS as the host of the Berlin Qualipso CC has acquired extensive experience in recent years con-

cerning IT solutions for the public sector. A major issue has been and still is the heterogeneous nature of the IT landscape, which makes it difficult to exchange data between different applications or public entities. The applications used in the public sector in Germany are in general highly specialized for their application domain and offer all necessary functions and services for this domain in one tool. Interoperability with other applications of the same or a dif-
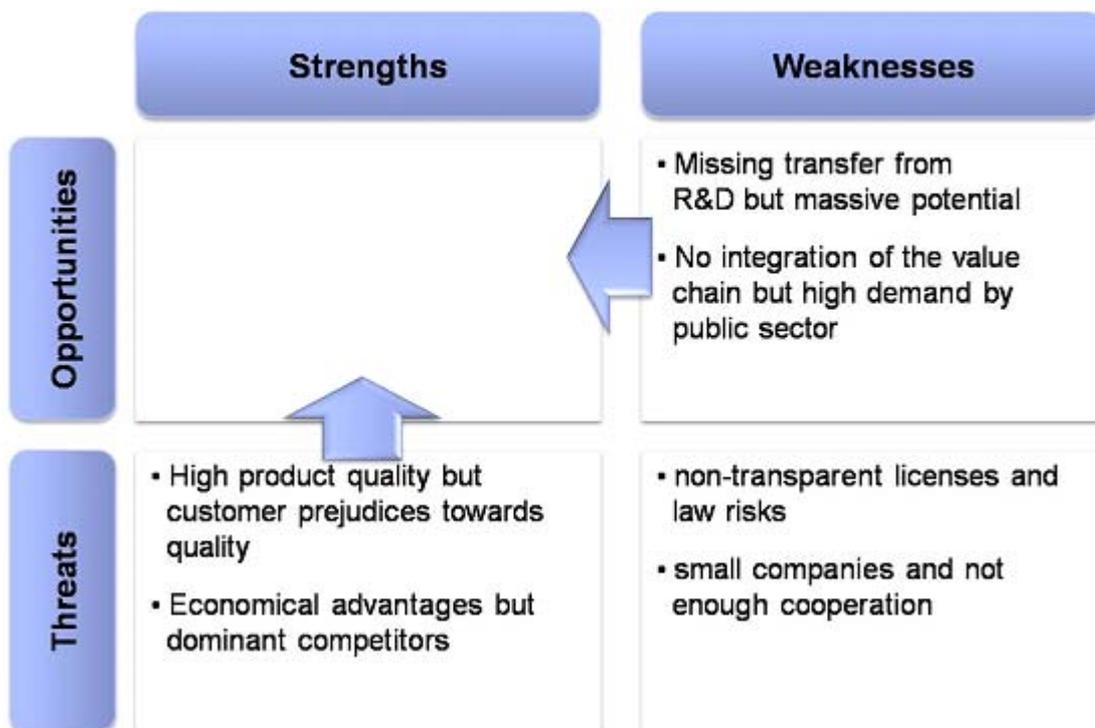

Figure 2: Strengths, Weakness, Oportunities and Threats (SWOT) Analysis Matrix.

ferent domain was not considered important. For data exchange between different applications it was most common to print a document in one application and type it into another application by hand.

Today there is evidence of a trend towards an efficient and customer friendly, process-based eGovernment connecting and integrating different application domains. Fraunhofer FOKUS became one of the key drivers for this trend in Germany by demonstrating in its eGovernment Lab [5] the possibilities and advantages of an integration and orchestration of different domain specific software applications. The eGovernment Lab is researching interoperability, connecting the public sector's major players, and communicating achievements.

A further trend in eGovernment currently observed by Fraunhofer FOKUS is the development of service-oriented architectures in the public sector. This is especially interesting for the OSS industry. Most OSS tools offer services solving a certain problem in numerous application domains instead of offering a bundle of services in one highly integrated application for one specific domain. By having Fraunhofer FOKUS transfer its interoperability and sector know-how to the Qualipso CC, it will be able to address the OSS public sector market with new interoperability scenarios. These scenarios will help the OSS industry to deliver complex domain specific solutions by more easily integrating and orchestrating interoperable OSS tools.

In addition to the focus on interoperability services for OSS, the recently opened Berlin Qualipso CC will foster OSS development by offering a state-of-the art forge as well as networking and communication opportunities for the OSS Industry. The CC will thus be addressing the OSS industry's most urgent needs in the Berlin region by transferring a proven approach from Fraunhofer FOKUS to the OSS sector.

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