The License Choices of SMEs doing Business with Open Source Software: Empirical Evidence on Italian Firms

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ABSTRACT

In the past decade, Open Source (OS) licenses have attracted the interest of many scholars. However, there is still a limited understanding of the license choices made by small and medium enterprises doing business with OS (OS SMEs). The present paper aims at filling this gap. The authors argue that, because of firm specificities, OS SMEs tend to prefer copyleft licenses. Their arguments are corroborated by empirical evidence from a survey on 146 Italian OS SMEs. This evidence documents that OS SMEs are not plagued by the GPL fear theorized by the OS founding fathers. Conversely, these firms use copyleft licenses to more easily in-source knowledge from the community of OS users and developers. At the same time, license choices are influenced by the ideological motivations that OS SMEs inherit from their owner-managers.

Keywords: Copyleft, Intellectual Property Rights, Licenses, Open Source, Small and Medium Enterprises (SMEs)

INTRODUCTION

In the late Nineties, the Open Source Initiative, a foundation established to push forward the diffusion of the Open Source (OS) software paradigm (Lee, 1999), elaborated the Open Source Definition. The preamble of the Open Source Definition explicitly states that OS “doesn’t just mean access to the source code”. To say that software is OS “is to say that it is subject to one of a particular category of licenses” (McGowan, 2001, 253). The Open Source Definition specifies all the criteria that a license must comply with to become “Open Source Initiative approved” and, thus, be defined as an OS license.

In the last decade, OS licenses have attracted the interest of many scholars studying the OS phenomenon. The first studies on OS licenses have focused on the description and classification of the main legal and techno-
logical features of these licenses (Fink, 2003; Kennedy, 2001; Oksanen & Valimaki, 2002; Pearson, 2000; Skidmore, 2007). More recently, scholars have investigated the determinants of the license choices made by the administrators of OS projects (Lerner & Tirole, 2005; Sen et al., 2008, 2011; Singh & Phelps, 2009) and the consequences of these choices on OS projects’ evolution and success (Stewart et al., 2006; Colazo & Fang, 2009; Ghapanchi & Aurum, 2011; Midha & Palvia, 2012). Comparatively less attention has been paid to the license choices made by firms doing business with OS (see, e.g., Koski, 2005; Lindman et al., 2011 for two notable exceptions). In particular, substantial opportunity still exists to improve our understanding of the license choices made by small and medium enterprises that offer OS-based solutions to their customers (OS SMEs).

Studying the license choices of these firms is undoubtedly relevant for two key reasons. First, more and more SMEs in the software industry are successfully basing their business on the provision of OS solutions (Bonaccorsi et al., 2006). For these firms, the community of OS users and developers (hereafter, OS community) constitutes a common pool from which they can in-source software code and programming competences. By using the OS code available on the Internet to develop new software solutions, OS SMEs can overcome the shortage of resources and competences that traditionally threatens the survival and growth of small firms (Stinchcombe, 1965). As we will extensively describe in the following, the license choices made by OS SMEs have a fundamental impact on these firms’ ability to successfully in-source software and competences from the OS community. An OS SME that decides not to rely on copyleft licenses is likely to encounter problems in integrating its software with the code produced by the OS community, which is for the most part GPLed (Lerner & Tirole, 2005). Second, license choices have important consequences for OS SMEs’ stakeholders. It is conventional wisdom that license choices primarily affect OS developers’ motivations to contribute to software development processes (see, e.g., Allyn & Misra, 2009). License choices may influence also the behaviour of OS SMEs’ customers. This effect is likely to vary depending on the type of customers, be they other firms, end-users or public bodies. For example, customer firms may be plagued by the GPL fear (Rosenberg, 2002) theorized by the OS founding fathers, and thus reduce the purchase of solutions provided by OS SMEs that have chosen copyleft licenses. This should not apply to public administrations and governments. Finally, the license choices of OS SMEs may affect the choices of the producers of complementary software solutions.

Given the current lack of studies and the relevance of the theme, in the present paper we examine the license choices of OS SMEs taking into account the peculiarities of these firms. We argue that OS SMEs, because of their firm-specific characteristics, tend to prefer copyleft licenses. This argument is corroborated by empirical evidence on 146 Italian OS SMEs. Our evidence documents that these firms do not fear the GPL. Conversely, they use copyleft licenses to more easily in-source knowledge from the OS community. At the same time, license choices are influenced by the ideological motivations that OS SMEs inherit from their owner-managers.

The paper is organised as follows. In the next section, we illustrate the rationale behind OS licenses and discuss about their importance for the diffusion of the OS movement. Then, we distinguish between copyleft and non-copyleft licenses and we describe the characteristics of these different licenses and the main advantages and disadvantages associated to their use. Afterwards we examine the influence of the peculiarities of OS SMEs on firm license choices. Then we illustrate our data and present our empirical evidence. The last section concludes the paper by summarizing its main findings, acknowledging its limitations and proposing avenues for future research.
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