Chapter 5.4
The Impact of Ideology on the Organizational Adoption of Open Source Software

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ABSTRACT

Previous research has shown that the open source movement shares a common ideology. Employees belonging to the open source movement often advocate the use of open source software within their organization. Hence, their belief in the underlying open source software ideology may influence the decision making on the adoption of open source software. This may result in an ideological—rather than pragmatic—decision. A recent study has shown that American organizations are quite pragmatic in their adoption decision. We argue that there may be circumstances in which there is more opportunity for ideological behavior. We therefore investigated the organizational adoption decision in Belgian organizations. Our results indicate that most organizations are pragmatic in their decision making. However, we have found evidence that suggests that the influence of ideology should not be completely disregarded in small organizations.

INTRODUCTION

The free software movement—led by Richard M. Stallman—has always taken an ideological, political view on software. Adherents to the free software movement advocate that all software should be free, in the sense that it should be free to read, modify, and distribute. The open source movement on the other hand was created in order to facilitate the introduction of free software in organizations and takes a more pragmatic stance in its efforts to market open source software (OSS). Previous research has shown that the open source movement is characterized by a shared, underlying ideology (e.g., Ljungberg, 2000; Bergquist & Ljungberg, 2001). Lately, an increasing number of developers are hired by commercial organizations to work on OSS projects. These developers may or may not share the OSS ideology. Nevertheless, many adherents to the open source movement still feel connected to the OSS ideology. Moreover, commercial organizations still need to find a balance between their commercial objectives and the

traditional values of the open source movement (Fitzgerald, 2006).

Many organizations have already adopted OSS, especially mature server software such as Linux and Apache. Research on the organizational adoption of OSS has shown that its use was frequently a bottom-up initiative, suggested by technical employees within the organization who are an adherent to the open source movement (Dedrick & West, 2003; West & Dedrick, 2005; Lundell, Lings, & Lindqvist, 2006). In some cases, decision makers could also be considered an adherent to the open source movement. These employees will take on the role of *boundary spanners* in their organization, bringing the organization in contact with new innovations (Tushman & Scanlan, 1981). West and Dedrick (2005) have found in their study on American organizations that although such employees try to ensure that an open source alternative is considered in the decision making, the final decision is made on pragmatic grounds (i.e., based on characteristics of the software such as cost, reliability, and functionality), and not based on ideological feelings towards OSS. The organizations included in their study are rather large,[1] which may have had an impact on their results.

We argue that it is useful to perform a similar study in a context in which there is more opportunity for ideological behavior. We expect that this might be the case in smaller organizations. In order to investigate whether decision making in small organizations is ideological, we have conducted 10 case studies in Belgian organizations to investigate the organizational adoption of OSS. The article is structured as follows. We will start by discussing the theoretical background of this study. Next, we will discuss our research design. Subsequently, we will present the results of our study, focusing on three organizations that used fairly ideological decision making. This is followed by a discussion of our findings. Finally, we will offer our conclusions.

THEORETICAL BACKGROUND

OSS Ideology

Numerous definitions have been proposed in literature for the term "ideology." Usually, the term is used in a pejorative meaning. Such use implies that an ideology is based on false beliefs of reality. Several authors however recommend against using such a perspective (e.g., Hamilton, 1987). The definition of ideology that we will use in this article is proposed by Hamilton (1987, p. 38):

"An ideology is a system of collectively held normative and reputedly factual ideas and beliefs and attitudes advocating a particular pattern of social relationships and arrangements, and/or aimed at justifying a particular pattern of conduct, which its proponents seek to promote, realise, pursue or maintain."

This definition is non-judgmental, and as a result we do not make any pronouncements with respect to the correctness of the beliefs, values, and norms that characterize an ideology. Hence, acting according to an ideology will not necessarily have negative consequences for the organization.

Previous research has described several ideological principles of the open source movement (e.g., Markus, Manville, & Agres, 2000; Ljungberg, 2000; Stewart & Gosain, 2006). This ideology has been shown to enhance the effectiveness of the OSS community (Stewart & Gosain, 2006). Stewart and Gosain (2006) identified a number of underlying norms, beliefs, and values of the open source movement (see Table 1). These norms, beliefs, and values are proposed as the tenets of the OSS ideology.

The tenets listed in Table 1 are used to describe the attitudes of developers within the OSS community. We argue however that some of the OSS beliefs and values (i.e., tenets 4–15 in Table 1) can also be shared by technical employees and decision makers in organizations. Hence, it is interesting to investigate whether decision mak-