# Chapter 13 The Adoption of Open Source Desktop Software: A Qualitative Study of Belgian Organizations

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# **ABSTRACT**

More organizations are currently migrating toward open source desktop software (OSDS). However, such migration is complex. More insight into the process will assist decision makers in making a well-informed decision on whether or not to migrate to OSDS and in building a strong business case to support this decision. In this paper, the authors present the results of a qualitative study in seven Belgian organizations and report on why these organizations have adopted OSDS and how the migration was undertaken. These cases represent challenging adoptions of OSDS. Results indicate that providing added value for users can positively influence user perceptions. In addition, the authors found strong empirical support for the guidelines with respect to the migration to OSDS that have been proposed in academic literature.

### INTRODUCTION

Open source software (OSS) has evolved considerably in the past decade. Thanks to the increasing commercial support provided by software vendors and service providers, the adoption of OSS has

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increased steadily (Ven, Verelst, & Mannaert, 2008; Morgan & Finnegan, 2007). The first wave of OSS adoption has primarily taken place on servers, with products such as Linux, Apache and Sendmail (Dedrick & West, 2003; Lundell, Lings, & Lindqvist, 2006; Ven & Verelst, 2008; Wichmann, 2002). Since the initial efforts of OSS

developers were focused on horizontal domains such as Internet applications and various technical utilities (Fitzgerald, 2005), these products were sufficiently stable and mature for organizations to adopt. Enabled by the increased involvement of commercial organizations, reliable OSS products have more recently become available in other areas, such as desktop or enterprise applications (Fitzgerald, 2006). In fact, some proprietary products have been released under an open source license, such as OpenOffice.org and Mozilla Firefox/Thunderbird. The second wave of OSS adoption seems to center around the adoption of desktop products, such as OpenOffice.org. Since 2004, an increasing number of organizations have indeed decided to migrate to open source desktop software (OSDS). Many of these migrations towards OSDS were undertaken by European public administrations.

The interest of organizations into migrating towards OSDS is therefore gradually increasing. However, it has been noted that such a migration is a complex undertaking since it requires a thorough understanding of how users interact with IT to perform their daily activities (Daffara, 2009). Given the large impact the adoption of OSDS has on the organization (i.e., every user in the organization will be affected by the migration), it is important to gain insight into the experiences of organizations with the adoption of OSDS. This insight will assist decision makers in making a well-informed decision on whether or not to migrate to OSDS and in building a strong business case to support this decision. Empirical data on previous migrations is therefore useful to provide insight into the factors surrounding a potential migration. It is particularly interesting to study the adoption decision in a context in which a migration to OSDS will be rather difficult, since organizations in such a context will be faced with the greatest challenges. Hence, it is interesting to learn from the experiences of such organizations. The Belgian context is well suited for this purpose, since the government is currently not promoting or supporting the use of OSS, and relatively few migrations have been performed so far. Therefore, we present the results of a qualitative study conducted in seven Belgian organizations—from both the public and private sector—that decided to adopt OSDS. Our analysis focuses on the "knowwhy" and "know-how" involved in the migration. Attention to both factors has been suggested to lead to more effective decision making since it avoids bandwagon phenomena in which organizations mimic the decision made by other organizations without properly examining the impact of the decision within the organization-specific context (Swanson & Ramiller, 2004; Swanson & Wang, 2005). The "why" question is relevant since it provides more insight into the motivation of organizations to explore the use of OSDS. The "how" question is relevant since it provides more information about how a migration can be accomplished in a successful manner.

### BACKGROUND LITERATURE

Previous studies on the adoption of OSDS have investigated both why and how organizations migrated to OSDS. Most of these studies have focused on the adoption of OpenOffice.org. First, a number of studies have been conducted on determining which reasons influence the adoption of OSDS. Such studies have mainly identified a set of advantages offered by OSDS that triggered the interest of organizations to migrate. However, most of these studies primarily focused on the use of OSDS by public administrations. The adoption of OSDS by private organizations seems somewhat understudied in literature. Second, some studies have attempted to derive guidelines for a successful migration towards OSDS. These studies aim to reduce the risks associated with a migration by providing a solution for issues that are frequently encountered during the migration. However, these studies generally derive and validate the set of guidelines using the same set of organizations.

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