

# Chapter 16

## Free Software Implementation Experiences for the Promotion of the Liquid Society

**C. De Pablos Heredero**  
*Universidad Rey Juan Carlos, Spain*

**D. López Berzosa**  
*Universidad de León, Spain*

### ABSTRACT

*Information and communication technologies have changed the way in which citizens interact with Public Administrations. Digital literacy is key for the development of the Liquid Society, and Public Administrations must take the lead in promoting more efficient, universal, and user oriented public services. The migration to open source standards allows Public Administration to offer more democratic, universal, and efficient channels for establishing relationships with citizens. In this article, the authors present international experiences that show how certain Public Administrations have migrated to open source software to promote digital literacy in the contexts they are operating. The final results depend on contextual and organizational factors, including the need to change, the political support and the existence of available technological resources, the organizational climate, motivation levels of human resources, and the kind of leadership for the project or the organizational complexity. Change efforts have strategic and organizational impacts that the organization must evaluate beforehand.*

### INTRODUCTION

Information and communication technologies allow us the establishment of new ways of relationships never thought before. Institutions seem to be trapped in a universe where they do

not clearly understand the control mechanisms (Giddens, 2002), yet they know it is going to offer them new and more efficient ways for promoting digital literacy in the “liquid society”. Bauman (2004) analyses the state of the art in today’s societies and establish the term “liquid modernity”. It refers to the way societies adapt today to new contexts. Time and space are more relative and

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allow us to shape new social scenarios, new ways to interrelate and to organize ourselves. Information and communication technologies allow us new possibilities to de-integrate the traditional ways we relate each other and integrate them in a different way. Liquid society is in permanent change. Institutions, Public Administrations, firms have transformed themselves and demand new ways of interaction. Public Administrations make use of ICT to promote digital literacy as “the capacity to understand and use sources of information when they are shown via a computer” (Gilster, 1997) in the liquid society. Public Administrations must make the best to implement ICT in order to improve the quality of life of everyone by removing technological and operational barriers.

Related to liquid society is the concept of Social Computing as an emergent paradigm characterized by user-centric, collaborative knowledge sharing, community-building activities using the Internet EU (2009). Social computing as an important phenomenon is now mainstream among citizenship and therefore should not be ignored by policy makers. Social computing creates new opportunities for user empowerment but also represents new threats such as digital divide or privacy concerns.

Although access to information is quite universal today, there are still some barriers either technical, cognitive (Tascón, 2006) or administrative.

A revealing case of existing administrative barriers hindering complete access to existing information is the measure that the Obama administration adopted in its early days calling for more transparent, participatory and collaborative government, USA (2009).

From a technical point of view, traditional business models of software development are failing to deliver the flexibility that modern society and electronic services require. At this point free software paradigm, as an alternative business model based on co-creation, can be an opportunity for surpassing these limits.

## **OPEN SOURCE AS ENABLER OF LIQUID SOCIETIES**

Open source migration (F/OSS) was first applied in the sixties. In the nineties it becomes a quite consolidated business alternative. Since then, free software implementation has been studied from both, a technical point of view (Raymond, 1999; Hunter, 2006; Rossi, 2006; Berry, 2008) as well as an economic emergent possibility in the market (Lerner y Tirole, 2002; Lerner y Tirole, 2005; Riehle, 2007).

Free software migration means an efficient solution in terms of costs, specially for the public industry and in contexts demanding great technological resources as it is the case of education (Lerner & Tirole, 2002; Riehle, 2007; Lakhan y Jhunjunwala, 2008). The implementation of free software tools promotes the innovation and the development in Public Administrations worldwide (David y Steinmueller, 1994; Shiff, 2002; Hippel y Krogh, 2003; Bitzer, 2005; Osterloh y Rota, 2007). Most experiences have just been started in the twenties and they are still in progress (Ahmed, 2005; UOC Report, 2009).

We must build a culture centered in the relationships between users. In our information society users must be the builders apart from consumers (Casacuberta, 2003). Free software developments can offer an opportunity to this fact.

We posit that open source development model can promote the development of liquid societies. Open source fosters a culture of sharing and collaboration in which users take a prominent role therefore leading innovation and technology adoption (Von Hippel, 2005).

Despite the benefits provided by free software to organizations, there are still some barriers for its use. In a recent Report published last April 2009 (EOI Report, 2009) amongst the positive effects of open source software, we find,

- It is an opportunity for firms and Public Administrations, since it implies a global technological option.

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