Chapter 11
KMS for Fostering Behavior Change:
A Case Study on Microsoft Hohm

Magda David Hercheui
Westminster Business School, UK & London School of Economics and Political Science, UK

ABSTRACT

This chapter proposes a new theoretical framework for understanding how knowledge management systems may foster behavior change. Drawing upon knowledge management research and institutional theory, the framework proposes that Information Systems and social media channels might support strategies for institutionalizing new patterned behaviors. More specifically, this chapter argues that Information Systems may speed up the diffusion of explicit knowledge and the articulation of tacit knowledge that favor behavior change. In making access to knowledge easier, these tools might build and strengthen new patterned behaviors. Using the proposed theoretical lenses, this chapter discusses an empirical example, Microsoft Hohm, which aims to promote behavior change in the domain of energy consumption in American residences.

INTRODUCTION

This chapter proposes a new approach to knowledge management systems (KMS) discussed from the perspective of behavior change. Drawing upon institutional theory, this study attempts to show how KMS may be designed to offer mechanisms that foster new patterned behaviors through diffusing knowledge on specific domains. The idea is that institutionalized behaviors may be challenged through legitimate mechanisms and that knowledge is a legitimate means for challenging current patterned behaviors and in turn fostering the emergence of new ones.

DOI: 10.4018/978-1-61350-195-5.ch011

This chapter focuses on the role of KMS in supporting the diffusion of knowledge, exploring the notion that changes in current knowledge frameworks may favor behavior change when the changes in knowledge affect the way people understand the world. In other words, information systems may foster behavior change through diffusing new legitimate knowledge that allows people to interpret the world in different ways.

Drawing upon the idea that KMS are information systems which allow for creating, stocking and sharing pieces of knowledge on a domain or organization (Alavi & Leidner, 2001), this research adopts a broad conceptualization, understanding KMS as any information system that supports the management of knowledge at the organizational or societal levels. This definition has the advantage of including all types of sorts of information systems, including Internet tools and social media, as far as they support the processes of knowledge creation or diffusion. In addition, this research takes into consideration that knowledge is mainly a human expression, which depends on cognitive and social processes, thus KMS should pay closer attention to instruments that allow more socialization, as explained below (Thomas et al., 2001).

It is proposed that KMS may also aim to foster behavior change whilst taking into consideration the institutional mechanisms that support established practices, understanding that knowledge frameworks influence the way people behave in society. This perspective impacts researchers and practitioners by showing how technology may be designed and applied to foster specific changes in society and organizations. It also suggests organizations may associate different tools to obtain a better management of knowledge in organizations, especially when it is necessary to cultivate spaces for socialization.

However, the chapter does not suggest that technology by itself is going to bring changes in behavior; rather, technology may only create a proper environment, providing people with the means to enact new forms of action. Technology does not cause change in behavior per se, but it is an important element and allows people to understand the world through new perspectives and it gives people the mechanisms to change behavior if they wish. In addition, it is necessary to be careful about what sorts of change one would like to promote, and what the reasons and reasoning are behind such changes. Companies and societies may have many reasons to foster behavior change. This chapter does not discuss these reasons and the legitimacy of nurturing change. It is solely focused on the role of KMS in cultivating change through diffusing and creating new knowledge frameworks.

This theoretical perspective is explored in this chapter through the analysis of Microsoft Hohm, an Internet tool that enables American residences to improve the management of energy consumption. The tool has been chosen considering the relevance of fostering change in energy consumption behavior in contemporary societies in order to create more sustainable economies.

The last decades have seen a crescent concern on whether economic development will be sustainable in the long term considering current production practices. In the broader domain of sustainable development, a major challenge is that the amount of information and knowledge is permanently increasing and under revision. In this context a major concern for researchers and practitioners is related to the need for improving the efficiency of information and knowledge management on sustainability (Bell & Morse, 2008; Haas, Kanie & Murphy, 2004; Kanie & Haas, 2004; Melnick et al., 2005; Pachauri & Reisinger, 2008). Indeed, research shows that information and communication technologies are important resources to help organizations and societies manage complex databases and diffuse knowledge that fosters the adoption of more sustainable economic practices (Alavi & Tiwana, 2003; Hilty, 2008).

Mastering the complexity of data and information in the domain of sustainability will not be enough if the related knowledge is not diffused