The Role of the Organizational Structure in the IT Appropriation: Explorative Case Studies into the Interaction between IT and Workforce Management

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ABSTRACT

The concept of appropriation is frequently used in IT implementation research. Rooted in the analysis of the diffusion of innovation, this concept is usually linked with characteristics of an organization’s structure, size, and sector. Since the 1980s, appropriation has been actively studied by IT researchers, who linked it with technological attributions and characteristics of users. In this paper, the authors observed the application of the appropriation concept developed from the extreme of giving full credit to technology, and the other extreme of fully crediting end-users. The authors argue that to capture a full range of benefits from technology and human interaction, researchers cannot ignore organizational structure. By presenting three case studies, this paper shows that it is necessary to reintroduce this “side” to have a complete analysis of appropriation.

Keywords: Appropriation, Case Study, Organizational Structure, Technology, Technology and User Interaction, User

INTRODUCTION

Today, the notion of appropriation is common knowledge for researchers and practitioners. They all know that users continuously reinterpret technologies in order to use them in accordance with their needs. Appropriation describes real interactions that persons develop with technologies and especially with IT. It is different from acceptance, although they have much in common. Acceptance refers to the users’ perception of an IT tool without implying action (Davis et al., 1989). Thus, individuals may accept an IT tool without using it. Appropriation focuses on what actors really do with IT. The concept of appropriation was initially elaborated to explain difficulties in the diffusion of innovations within the organizational studies (Perriault, 1989; Jouet, 1993; De Certeau, 2002). Confronted with low levels of the use of innova-
tion, researchers concluded that the structural features of innovations did not correspond to the users’ expectations. In each department of an organization, persons have specific tasks and results to achieve. When an innovation is developed, users evaluate if it helps them to realize those tasks better. If that is not the case, they usually do not use the innovation. At that time, the characteristics of organizations were considered a major factor explaining the success or failure of an innovation.

Later, the concept of “appropriation” was addressed in IT implementation studies. The Adaptative Structuration Theory (AST) (De Sanctis & Poole, 1994) was one of the first to apply the concept of appropriation. The authors proposed a strong framework that links the nature of the technology used (structural features and spirit of technology) and different ways of appropriating it. While acknowledging the interpretive flexibility of the technology itself, that conceptualization underestimated the role of users in the appropriation and interaction process. In 2000 Orlikowski proposed her “theory of practice” to gain insights into the process of how users intervene in the appropriation of technology (which she names “enactment”). IT implementation studies produced two fundamental studies – AST and theory of practice – that approach the appropriation of technology from two opposite but complementary sides. On the “technological” side, AST (De Sanctis & Poole, 1994) gives lots of credit to the technologies by underlining how their structural features can explain appropriation. On the “user” side, theory of practice (Orlikowski, 2000) put forward that users permanently reinvent their uses of technologies.

In this paper, we propose integrating yet a third aspect into the process of appropriation during the interaction between technologies and actors. Although these two broadly accepted concepts are fundamental, they lose the link with the organizational structure side of the appropriation. Especially in workforce management, the “structural features” and “spirit” of technologies are directly linked to the organization where the technology is implemented. Moreover, the users of those technologies – HR professionals, line managers, and employees – are always under the organizational influence of power, rules, and cultures that affect the appropriation of a technology. Taking all of this phenomenon into account, this paper suggests refining the concept of appropriation in the process of interaction between technology and actors by adding the dimension of an organizational structure to a broadly accepted binary inclusion of technological and user characteristics.

Our paper develops this idea by presenting three different tools used in three different kinds of organizational structure. The first case study involves an HR intranet used in a professional bureaucracy. The advanced decentralisation of power, characteristic of this kind of organizational structure, directly explains the low use of this intranet. The second one is an Enterprise Resource Planning (ERP) implemented in a supermarket group of stores. In this case, the advanced centralization of power, characteristic of this kind of divisionalized structure, explains the difficulties that store managers encounter with this ERP. The last tool is a collective decision-making software used in a small and medium-sized enterprise (SME). This case study shows that the manager of the SME did not evaluate this software on the basis of what it allows employees to do but on its capacity to help him to create a new organizational structure in this enterprise.

The paper is arranged as follows. The first section contains the theoretical framework for this paper. By analysing the existing literature, we show that the concept of appropriation emerges in the studies on diffusion of innovation. It has been very much refined by AST (De Sanctis & Poole, 1994), which underlines how the structural features of the technologies play a role in appropriation, and by theory of practice (Orlikowski, 2000), which proposes a deep analysis of the role that users play in appropriation. At the end of this section, we present several studies that put forward the idea that it is also useful to take into account an “organizational” dimension in this reflec-
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