Chapter IX
From DRM to Enterprise Rights and Policy Management: Challenges and Opportunities

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ABSTRACT

This chapter introduces digital rights management (DRM) in the perspective of digital policy management (DPM) focusing on the enterprise and corporate sector. DRM has become a domain in full expansion with many stakes which are by far not only technological. They also touch legal aspects as well as business and economic. Information is a strategic resource and as such requires a responsible approach of its management, almost to the extent of being patrimonial. Digital rights and policy management is now well established mainly in two distinct sectors sharing the same fundamental underlying technical principles: on the one hand, the entertainment and media industry, and on the other hand, the enterprise sector. This chapter mainly focuses on the latter, introducing DRM concepts, standards, and the underlying technologies from its origins to its most recent developments in order to assess the challenges and opportunities of enterprise digital policy management.

INTRODUCTION

Digital rights and policy management has become a domain in full expansion with many stakes, which are by far not only technological. They also touch legal aspects as well as business and economic as described in Becker, Buhse, Günnewig, and Rump (2003) and Rosenblatt, Trippe, and Mooney (2001). Information is a strategic resource and as such requires a responsible ap-
proach of its management almost to the extent of being patrimonial.

Let us mention as an example some recent cases such as the loss by UPS of a parcel containing the information of 3.9 million clients of a Citigroup company (Ewalt, 2005). Or the loss of personal data of 600,000 current and former Time Warner employees while in physical transport (Silver, 2005; Time Warner, 2005). These only represent a couple of recent examples of known cases of information theft, leakage, or disclosure that most companies would have rather not disclosed. This is probably not new, but what changed in recent years and “forced” disclosure of such information lies in the obligation to comply with emerging regulatory frameworks. An interesting chronology and up-to-date monitor of such events can be found on the Privacy Rights Clearinghouse Web site (Privacy Rights Clearinghouse, 2005).

Digital rights and policy management is now well established mainly in two distinct sectors sharing the same fundamental underlying technical principles: the entertainment and media industry and the enterprise sector. This chapter mainly focuses on the latter while sketching the broader challenges and opportunities of this industry.

The overall objective of this chapter is essentially twofold. First, it is a plea for raising awareness on the strategic nature of using digital rights management technologies in the corporate environment for digital policy management. To this end we present a basic guiding framework for corporate policy management. Second, assuming this awareness, we argue the corporate information systems landscape is on the verge of a profound transformation by which systems will have to factor in persistent protection, governed usage and managed content. In other words, to become “rights and policy enabled.” A key challenge facing the DRM industry still remains to be tackled with interoperability issue both at functional and semantic levels. Proprietary incompatible solutions could represent a major legacy and problem for the future. It is thus critical to both address the interoperability issue and the strategic dimension of digital policy management.

Specific objectives include understanding the background and fundamental concepts of DRM including standards in this industry, providing a clear view of the stakes and challenges facing the corporate and enterprise sector with respect to DRM and persistently managed information, raising the debate to the level of global corporate policy management, understanding that the issues are strategic and not technological and finally to provide some insights on future trends.

This chapter is organized as follows; after a brief introduction, the second section presents the background, the fundamental underlying concepts, and the evolution of DRM. Particular attention is given to picture more recent initiatives and trends with respect to standards. We then focus on the corporate and enterprise sector, presenting the issues of regulatory frameworks, compliance, risk and corporate governance and how these relate to DRM technology. Shortcomings of traditional approaches are then discussed, thus setting the ground for opportunities to considering a broader approach of digital policy management. The following section discusses future trends and leads before conclusions.

BACKGROUND: ORIGINS AND EVOLUTION OF DRM

In order to better grasp this field and its evolution from its inception to its recent developments, let us review some of the key concepts and contributions in this field. This will allow to shed some light on current issues in this industry considering challenges and opportunities.

What is DRM and Where is it Used?

DRM is the acronym for digital rights management, it represents a technology allowing to cryp-
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