

## Chapter 29

# Is DRM the Great Spoiler in the IDM Marketplace?

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### ABSTRACT

*Digital Rights Management (DRM) has been a popular option employed by firms to deal with piracy issues. The rationale of DRM, the expected benefits for firms, and their implications in the Interactive Digital Media (IDM) marketplace are presented. Using the VISOR framework, the chapter also analyses the impacts of DRM based in the IDM marketplace, and to suggest if DRM is the great spoiler in the IDM marketplace. Studies have shown that the advantages brought by DRM to firms go beyond what would be needed for an efficient provision of digital goods. The chapter concludes with some recommendations and suggestions whether DRM is the great spoiler in the IDM marketplace.*

### INTRODUCTION

With the advent of modern information technologies, the wealth of information provided by digitization devices e.g. desktop computers, laptops, MP 3 players, iPod players, PSP players, Nintendo, IP TVs, has grown dramatically. The contents of digital information in the form of sound and multimedia e.g. video shows, video clips, video games, digital music, as well as still

images, e-books etc. offer many advantages to the users as they are able to enhance human-machine interaction in many areas. Owing to the usefulness and many advantages offered by this digitized contents, they have been turned into digital goods for sale over the computer networks. The emergence of this new form of business is known as the content industry.

Within the content industry, e-commerce is becoming a primary distribution channel for the interactive digital media (IDM) marketplace. The IDM marketplace consists of three groups of

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intermediaries i.e. syndication, aggregation and distribution who come between the producers and consumers of digital media products and services. The relationships amongst all the various participants of this IDM eco-system can be complicated as many issues e.g. selling of digital content over computer networks remain unresolved.

As digital content can be easily altered, copied or even distributed to a large number of recipients or consumers, the extent of consumers' piracy can undermine the growth and viability of the vendors in this industry. This is because piracy can cause revenue loss to these media companies (Qiong Liu et al., 2003). Sony, for instance, has blamed digital piracy for eroding its profit at its music business posted a loss of 10.3 billion yen (US\$160 million) in 2002 (Suzuki, 2002).

To prevent unauthorized access to digital content and manage content usage rights, one of the most common solutions is the introduction of Digital Right Management (DRM) technologies. In this aspect, supporters of DRM systems believed that they could help to provide a secure distribution of digital content. In addition, DRM enables the firms to gain additional strategic advantages e.g. switching costs, consumers lock-in, and barriers to entry, absence of second-hand market, and collection of information on the consumers' behavior. It can also help the firms appropriate extra revenues (DRM allows the high-tech firms to charge consumers several times for the usage of the same digital goods at different locations e.g. car, home, workplace etc.) (Rayna et al., 2007).

The opponents, however, argue that DRM infringes private property rights, prevents the legitimate users to take full advantage of the digital media and that such moves restrict users' activities.

This chapter presents an overview of the current state in DRM and its role in the IDM marketplace. It also discusses the rationale of DRM, the theoretical framework of Visor as well as analyze its impact on IDM marketplace e.g. high-tech firms, consumers and society with real life examples using the Visor framework. With the in depth

analysis of the DRM and its impact, this chapter seeks to find out if the DRM is the great spoiler of IDM marketplace.

## **DIGITAL RIGHTS MANAGEMENT**

As music and films are becoming more and more popular for consumption via the Internet, this is exactly where DRM plays its role by providing a secure environment for transactions of copyrighted content in the networked world to be sold and purchased (Sensarkar, 2007). DRM is a generic term for a set of technologies for the identification and protection of intellectual property in digital form (Sensarkar, 2007). There is no big difference between the electronic and the common meaning of the term "copyright" (Rao, 2003). The term 'e-copyright' came from the time of Napster, peer-to-peer file-sharing service. It gave an opportunity to users to illegally distribute and exchange digital music files. File-sharing is a highly dynamic field with variety of publication platforms and access tools. New tools like torrent networks appeared on the horizon that sequentially substitute file-sharing services (Wolf et al., 2007). The challenge is to prevent access to content without an authorization, in other words, consumer's usage rights must be explicitly expressed so that content providers do not lose out on generating their revenue.

In order to protect copyrighted work and prevent unauthorized usage, a number of mechanisms were developed such as allowing identification of security and control of the content so as to avoid economical losses for copyright owners as well as their moral rights (Fernandez-Molina & Peis, 2001). Various systems like ECM (Electronic Copyright Management), DRM (Digital Rights Management) and ERM (Electronic Rights Management) allow methods of protection of property used in various sectors but which may not be obvious in the digital environment (O'Rourke, 1998). For instance, "Regulation by law" is different from the "regulation by code" or through

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