

# CDT Offers Metrics for Evaluating DRM

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The Center for Democracy and Technology (CDT) has issued a paper outlining specific questions that product reviewers and, ultimately, the public may want to consider when evaluating media devices and services incorporating digital rights management (DRM) technologies.

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## 1) CDT Offers Metrics for Evaluating DRM

The Center for Democracy and Technology (CDT) has issued a paper outlining specific questions that product reviewers and, ultimately, the public may want to consider when evaluating media devices and services incorporating digital rights management (DRM) technologies.

Content creators view DRM as an important tool to help protect their content from widespread uncontrolled distribution in the digital environment. Critics question DRM's effectiveness, but CDT's premise is that DRM is already an established feature of the media marketplace and is likely to remain so. Moreover, while a number of policy debates touch on issues relating to DRM, for the foreseeable future it is the market, rather than government, that is likely to play the primary role in shaping DRM.

It therefore will be important for the public and product reviewers to understand how to evaluate the impact of DRM on the media user's experience. Different DRM systems will provide different capabilities for users. An informed base of consumers capable of comparing products and expressing and acting on their preferences can help ensure that the marketplace for digital media products is diverse, competitive, and responsive to reasonable consumer expectations. The extent of the public's current understanding of DRM, however, is at best unclear. A 2005 survey of European digital music users, for example, found that 71 percent did not know whether the music they purchased was subject to usage restrictions.

CDT's paper seeks to promote greater public understanding and discussion of DRM by providing consumers, product reviewers, and consumer advocates some concrete guidance concerning the factors to look at when evaluating DRM in the marketplace. The goal is not to suggest that any particular DRM schemes are "good" or "bad" in any general sense, but rather to provide tools for consumers to assess the DRM-related tradeoffs associated with different marketplace offerings.

[Evaluating DRM: Building a Marketplace for the Convergent World](#) [1]

## 2) Questions To Ask in Measuring and Comparing DRM Technologies

DRM has already been widely deployed in several common digital media products, including prerecorded DVDs, digital video recorders such as those made by TiVo, copy-protected CDs, and online digital music services. CDT's paper starts by discussing the DRM in these products, focusing both on the ways in which DRM limits certain consumer uses of digital media and on the ways in which it facilitates new channels for the distribution of content.

These various implementations of DRM in the media marketplace illustrate that DRM can operate in a variety of ways, with a variety of consequences for consumer choices. Therefore, CDT's paper seeks to set out some different dimensions against which DRM products may be measured and compared, on the theory that the ability of consumers to compare DRM products will be essential to driving competition between different DRM offerings.

CDT's list of consumer metrics for DRM-equipped digital devices and services is not necessarily exhaustive, but it identifies some specific questions that CDT believes product testers and reviewers should be asking as they evaluate media products. CDT's proposed metrics fall into four main categories.

### **1) Transparency**

Is there clear disclosure to users of the effects of DRM?

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- Relevant information for disclosure: Are users given fair notice of product characteristics that may be relevant to them?
- Manner of disclosure: Is notice provided in a manner that is sufficiently prominent and understandable? Is important information buried in long license agreements or similar fine print?
- Timing of disclosure: Is notice provided at appropriate times? For example, is notice provided both up front, and as part of ongoing interactions with the product or service?

### **2) Effect on Use**

What are the specific parameters and limitations for the use of a work?

Personal use and copying of works: To what extent do DRM measures facilitate or permit personal uses and copying of content, for purposes such as time shifting, place shifting, and limited sharing?

- Choice and interoperability: Do DRM protections allow consumers to use media they buy on a wide variety of platforms and devices, or with a wide range of services - or is interoperability narrowly limited?
- Facilitating end-user creativity: To what extent do DRM measures facilitate end-user creativity, by allowing users to interact with and create content rather than just passively receiving it?
- Permanence / risk of unexpected loss of access: Does a DRM scheme create risks that users could unexpectedly lose access to their content?

### **3) Collateral Impact**

Does the DRM have any other potential impact on a user, aside from its direct impact on the ways the user can use or distribute the protected content?

- Privacy and anonymity: Are users' privacy and anonymity preserved? What data is "phoned home" to a central server of the content distributor or other party?
- Security: Does the DRM carry any risk of impairing the security of users' computers or other devices?
- Device functionality: Are there other ways in which in which the DRM could impair the functionality of users' computers or other devices?

### **4) Purpose and Consumer Benefit**

- Does it appear that DRM is being used to innovate and facilitate new business models that fill previously unaddressed demand and give consumers new choices?
- Or is DRM being used to lock consumers into old business models or to limit consumers' choices in services and devices?

In assessing how a particular DRM performs with respect to these criteria, there are a number of things to keep in mind. Naturally, different types of media products may carry different consumer expectations and raise different issues; some of the questions above may be more relevant to some types of media than others, and in some cases direct comparisons may present apples-to-oranges problems. Different types of business arrangements may be relevant as well. For example, a movie downloaded for rental may come with more restrictive DRM than a movie downloaded for purchase, but consumers and product reviewers might view the difference as reflecting an attractive tradeoff in light of the difference in price.

CDT also believes that product reviewers and others should not limit their analysis to comparisons with prior or existing products or services. Advances in digital media technologies make possible an evolving set of capabilities and uses. A forward-looking frame of reference would consider what an honest and law-abiding consumer would be able to do with networked, general-purpose computers and open-format media, and use this as one basis of comparison.

CDT's point here is not that everything that is possible with unprotected content on general purpose computers should immediately be possible for DRM-protected content; after all, unprotected content is easily susceptible to massive piracy. But comparisons to an unprotected media environment, by highlighting what might be possible from a purely technical perspective, may help illustrate the technical choices and tradeoffs associated with DRM. Over time, product reviewers and consumer advocates may fairly press manufacturers and content owners to develop secure ways of implementing the missing capabilities.

[Evaluating DRM quick-reference guide](#) [2]

### **3) The Importance of Competition in the DRM Marketplace**

Development of a well-functioning market for DRM is important for achieving balanced solutions to the policy challenges posed by the problem of copyright infringement on the Internet. As CDT discussed in a 2005 paper, *Protecting Copyright and Internet Values: A Balanced Path Forward*, the deployment of new models for lawfully accessing content online and in digital form is an essential component of a viable strategy for digital copyright policy. New distribution models are likely to rely on DRM to prevent widespread infringement and enable services - such as online movie rentals - that consumers will find attractive.

In short, DRM can be a key component of a vibrant digital media marketplace. But this requires the development of a robust content delivery and DRM market in which consumers have multiple choices and sufficient information, and in which reasonable consumer concerns about issues such as DRM's privacy impact are satisfactorily addressed.

Attractive, lawful digital content offerings, combined with strong enforcement of copyright law to make infringement unattractive, can provide the foundations for a sound and balanced approach to the issue of copyright infringement on the Internet. Finding balanced solutions is crucial, because the likely alternatives are technology mandates or regulatory restrictions that are inconsistent with innovation and the open architecture of the Internet.

[Protecting Copyright and Internet Values: A Balanced Path Forward](#) [3]



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