

INFO2009 - Resource

DRM and Copyright Issues

# Introduction

- Copyright and piracy
- Measures taken to counter piracy
- How does DRM work
- Uses and misuses of DRM

# Copyright

- The copyright law in this country is older than the internet, the Copyright, Designs and Patents Act 1988 defines what copyright is, and how copyrighted materials should and can be protected.
- Although it was later amended it wasn't until the Digital Economy Act 2010 that the laws surrounding piracy and other related issues with modern technology were taken into consideration.



# Copyright Issues (piracy)

- Copying films and music illegally is a widespread practice
- Downloading content that has not been paid for
- Peer-to-Peer networking and Torrents are popular file sharing methods people use to distribute media illegally

# History of DRM

- First started with copy protection on floppy disks back in the 80's
- 1982 - Software distributed with color coded sheets (similar to a modern authentication code)
- 1984 Lenslok - Scrambled code displayed on screen during installation, only readable with a special lens included in retail box (severely frustrating for most paying customers whereas cracked version does not use lens at all)
- Early 90's - Different methods for disc writing making use of difference between write/read operations (Easy to read disc, hard to copy)



# History of DRM continued

- Late 90's - Internet becoming popular creates new front for piracy issues
- Online authentication systems are implemented. They have the drawback of requiring an internet connection
- 2000's - Two big DRM disasters; Sony BMG and SPORE from EA
- Both had software running on the user's system to monitor all activity (tracks played from cd, number of installations of program and so forth)
- These software were "hidden" from the user, usually in rootkits. Both resulted in lawsuits against the company



# DRM - Who uses it

## Apple's Fairplay system for iTunes content

- Restricts the number of computers that can be used to play content
- Can only be played on Apple's portable devices
- Now removed from most music on the iTunes store, but still present on videos



# DRM - Who abuses it

## The Pirate Bay

- Provides access to pirated, DRM free content
- Ongoing legal battle with music and movie licensing companies
- Founders now sentenced to prison time and fine





# DRM - The good

- Protects intellectual property
- Ensures creators of the content are paid
- Even circumvented DRM can sometimes reduce piracy
- Facilitates new innovative business models for content distribution



# DRM - The bad

- Only restricts legitimate consumers as DRM is normally removed from illegal copies
- Adds costs to content creators that is unnecessary if it is circumvented
- DRM is not consumer friendly as it restricts use



# Conclusion

- Copyright legislations were not updated until the new Digital Economy Act
- There has been many attempts at DRM and some have failed in the past
- Apple Fairplay is a decent implementation even though it is restrictive
- The Pirate Bay abuses content DRM
- DRM has both positive and negative aspects

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