

MI 703 CIS Session #5

- ◆ Digital Rights Management
- ◆ Apple Computer
- ◆ SCM
- ◆ Midterm exam info

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Slide 1

Digital Rights Management

- ◆ What is DRM technology?
 - A technology that allows content providers to place controls on **modification**, **copying** (across media, devices, **transfer** (across people), and **use** (time windows, subscriptions, streaming only) of digital content
- ◆ Areas
 - **Digital media**: music, video, ebooks (e.g., Apple Fairplay, Windows Media, Real Media)
 - Software, games
 - Corporate documents (“Enterprise” DRM)
- ◆ Key laws/decisions
 - Video tapes: 1984 Betamax decision
 - Digital audio tapes: 1992 Audio Home Recording Act
 - Digital Media: 1998 Digital Millennium Copyright act

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Examples of DRM in action today

- ◆ Music
 - iTunes (Apple)
 - Rhapsody (RealNetworks)
- ◆ Video
 - MovieLink (JV of 5 major studios)
 - Vongo (Starz)
 - Apple iTunes Video

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iTunes (Apple)



- ◆ .99 for all songs; 3.5 million songs available, >1 billion downloads so far
- ◆ Many formats including iPod-only ACC
- ◆ Digital Rights Mgmt
 - “Fairplay” DRM
 - Only plays on iPod
 - Unlimited burning of single tracks, and downloads to iPods
 - Playlists burned only 7 times before have to be changed
 - Download to only 5 computers at once

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Rhapsody – RealNetworks



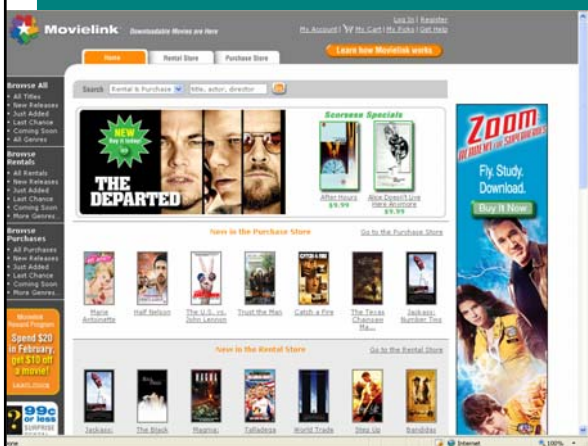
- ◆ 1.3 million songs
- ◆ \$9.99/month for PCs, \$14.99 to include portable music players
- ◆ Unlimited streaming and downloading
- ◆ Rhapsody channels
- ◆ DRM: Microsoft Windows Media Player
 - All downloads inactivated when subscription ends

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MovieLink



- ◆ Joint venture of 5 major studios
 - \$4-\$5 for most rentals
 - Store for 30 days
 - 24 hrs to watch after hit “play”
 - \$10-20 to buy/burn
- ◆ Varying list of 2,500 new and old movies
- ◆ Can stream or download
 - Near DVD quality
- ◆ DRM: Windows Media Player and RealPlayer

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Vongo (Starz!)



- ◆ From Starz! (cable channel)
- ◆ \$9.99/month subscription
- ◆ Or rentals for \$4-\$5
 - Have 24 hrs to watch “available” movies after hit “play”
- ◆ Varying list of 2,000 new and old movies
 - Each with different “available until” date
- ◆ Download only
- ◆ DRM: Windows Media Player

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Apple iTunes Video



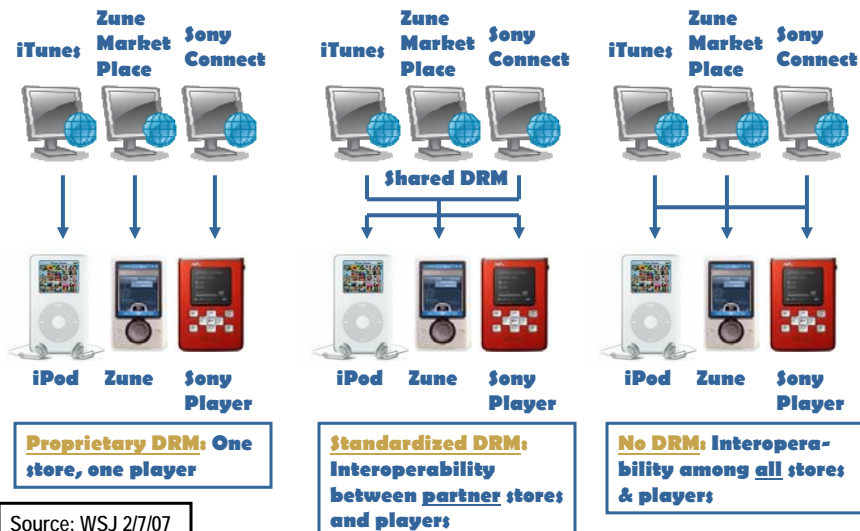
- ◆ Can playback on:
 - Video iPods (to TVs and PCs)
 - Apple TV
- ◆ Cost
 - Shows are \$1.99
 - Movies \$10-15
 - Other content is “free” (might have commercials)
- ◆ Content
 - Music videos
 - Selected TV shows from ABC, NBC, Disney
 - Some movies (Disney, Paramount, Pixar)

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Three Models for our DRM Future



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The Heart of the DRM Conundrum

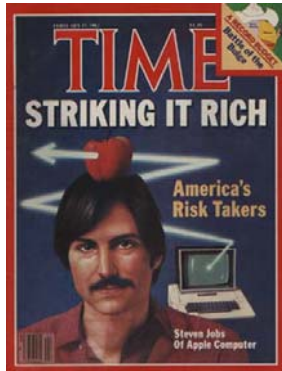
- ◆ DRM does two kinds of things:
 - Stops “Bad” activities that (almost) everyone agrees are illegal and/or unethical (e.g., redistribution)
 - Stops “Other” activities ranging from things that should be allowed (e.g., “fair use” copying) to “grey area” (e.g., making multiple copies for personal use)
- ◆ The DRM balancing act
 - **Too weak:** provides a convenient new channel to obtain content for “Bad” activities
 - **Too strict:** stops too many “Other” activities, angers customers, pushes them away from legal channels entirely

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Apple Computer Case Analysis



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