



Lecture 11 – The Package Software Industry

Karl R. Wilcox
K.R.Wilcox@reading.ac.uk



Objectives

- To understand the different roles of organisations in the package software industry
- We will consider the games industry
 - Others are similar
 - Probably less complex!
- Today's practical
 - Investigating Software Licenses



Structure of the Industry

- **Developers**
- **Publishers**
- **Distributors**
- **Retailers**
- **Hardware Manufacturers**
 - (Mostly only relevant to Games Industry)



Publishers

- Bring products to the market
- Create “schedules” of planned releases
- **Responsible for**
 - Commissioning & funding products from developers
 - Marketing & promotion
 - Organising manufacture
 - Obtaining agreements with distributors
- **Make money from**
 - Royalties from sales
 - To cover advances to developers
 - Shared royalties thereafter



Developers

- **Create the product**
- **By employing**
 - Programmers, artists, designers, sound engineers, musicians, actors, producers, writers...
- **Responsible for**
 - Writing, testing & supporting the product
 - Finding a publisher
- **Make money from**
 - Advances from publishers
 - Royalties from successful products



Distributors

- **Maintain stocks of product**
- **Sell to “lower level” distributors or to retailers**
- **May have exclusive agreements with publishers**
- **Responsible for**
 - Logistics (delivering product as required)
 - Obtaining agreements with publishers and retailers
- **Make money from**
 - Selling products for more than they bought them



Retailers

- **Sell directly to the public**
- **May be High Street / Mail Order / Internet**
- **Responsible for**
 - Obtaining agreements with distributors
 - May run their own promotions
- **Makes money from**
 - Selling games for more than they paid the distributor



Hardware Manufacturers

- Only have a significant role in console games
- Validate games for use on console
- Responsible for
 - Development & manufacture of console hardware
 - Marketing of the console “platform”
- Makes money from
 - Licenses to develop software for that console
 - Royalties from software sales
 - (Usually lose money from sales of console hardware)



Product Types - Licensed

- **Based on existing Intellectual Property**
 - e.g. film / TV programme / book
- **Licenses usually acquired by publisher who then seeks developer**
- **Sometimes developers seek rights directly**
- **Advantages**
 - Recognition factor / joint marketing
 - Therefore increased sales
- **Disadvantages**
 - Very large up front costs for rights + royalties
 - Timescales may be driven by film release dates etc.



Product Types - Original

- **Usually created by developers**
 - Idea then “sold” to publishers to fund further development
 - Banks & other backers may fund early development
- **Advantages**
 - No licensing or additional royalty costs
 - Control of timescales & other aspects
- **Disadvantages**
 - Riskier (especially for developer in early stages)
 - Product must stand on its own merit



Product Types - Conversion

- **Simple conversion from one format to another**
 - PC to Mac (or vice versa)
 - PC to Linux (or v. v.)
 - For games only – between consoles
- **Some products developed for multiple platforms in parallel**
- **Advantages**
 - Proven demand, tested product
- **Disadvantages**
 - Increased support required
 - Code / features may be difficult to port
 - Especially between games consoles & PCs



Developing for consoles

- Additional up-front costs for development licence & tools
- Ongoing royalty payments to console manufacturers
- Must submit product to manufacturers for testing / validation
- Closed system
 - Defined, stable platform
 - Minimal ongoing support costs
 - Extreme difficulty in fixing bugs after release!



Developing for PCs

- No licensing costs for use of platform
- Cheap (or free) development tools
- No royalty to hardware manufacturers
- Open platform
- Extreme variability in operating environment
- Expect high, ongoing support costs
- Possible to issue patches / updates
 - Get it right 2nd time (or 3rd, 4th, 5th ...)



Complications

- **A single company may take on more than one role**
 - Especially Publisher & Developer
 - Also hardware manufacturer and publisher
 - But still deal with others of the same type
- **Distribution rights and licensing rights may have geographical restrictions**
 - Different publishers / distributors in different parts of the world



Differences Between Games & Other Software Products

- Not so much licensing for other software
 - Perhaps “Alan Titchmarsh Garden Designer”
- Very little non-game software for consoles
 - DVD players for Xbox / Playstation 2
- Need for fewer “creative” staff
 - Artists, musicians, actors
- Simpler testing regime
 - Just functionality, no real equivalent of “Gameplay”
- Lower costs of entry / development permit other funding models
 - See next slide



Other Funding Models - 1

- **Freeware**
 - Typically reduced functionality
 - Designed to raise awareness of the full featured product, or of the developer
- **Open Source Software**
 - Freely available at source code level
 - Changes must be made equally available
 - Developed by “community”
 - Or by commercial organisations
 - Possible to make money from support / training / consultancy / repackaging & distribution



Other Funding Models - 2

- **Shareware**
 - Developer writes & distributes own software via internet
 - Product can be freely distributed but normally limited in some way
 - Time restriction
 - File size restriction
 - Advertisement insertion
 - User pays small amount to developer to unlock full feature set
- **Adware**
 - Free, full function software but user must view advertisements
 - E.g. Opera Browser, Eudora Mail client



Today's Practical

- **Investigating Software Licensing**
- **Understanding End User Licence Agreements**
 - Or trying to!
- **REMEMBER TO SIGN OFF ON THE REGISTRATION SHEET!**