



Trafalgar Pincio
Corporate Finance

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Present

AN INTRODUCTION TO THE GAMES INDUSTRY

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INDUSTRY SUMMARY

Over the last two years, the market for interactive entertainment has grown dramatically, with both hardware and software products catering to surging demand. Many industry experts believe that the interactive entertainment industry is now entering the steepest part of its growth cycle to date.

Several demographic trends and fundamental market drivers continue to fuel this rapid growth. The most compelling of these trends include:

- The widening age demographic of the interactive game consumer - most gamers do not leave the market as they age, they simply move on to play different games;
- Rapid growth of the teen population over the next five years with a corresponding increase in their aggregate disposable income; and
- Growth of the female gamer demographic, as more women and girls enter this market (at the moment this applies especially in the US).

The interactive media industry is essentially a hybrid of the software and entertainment industries. While the development of games requires extensive software development expertise, the economics of game titles are more similar to the film or music industries. In fact, interactive media is one of the few sub-sectors of the software industry that is experiencing significant growth in the current depressed technology market. This sector exhibits many of the signs that indicate significant growth prospects in this industry:

- A dramatic improvement in the underlying technology platforms;
- Large numbers of relatively small start-up's (still);
- The emergence of substantial companies in the industry, with other large companies from related sectors beginning to show interest; and
- Emerging interest from investors, with new investment funds dedicated to this market starting to appear.

KEY PARTICIPANTS

The life cycle of game software is as follows: It starts with its creation after which it is then marketed, distributed and finally sold to the end-consumer. The key players and their roles in the industry are described below.

A. Development Studios

A development studio creates the software that runs the game on a particular platform. The key platforms in today's market are the PC, Microsoft Xbox, Sony PlayStation 2 and Nintendo GameCube (and to a lesser extent its Gameboy Advance).

Game software is comprised of two elements: (i) art assets such as graphic images, characters, sound effects and music; and (ii) the underlying software technology, referred to as the "game engine". The engine is the program that links the various art assets together and provides the overall gameplay experience. In the last five years, software tools for the creation of art assets and commercially available game engines have become increasingly powerful and affordable for developers, allowing even the smallest development shops to create products with a professional look that provide a high-level user experience. It needs to be remarked that some developers write their own game engine, while others buy game engines from either these developers or from specialist companies. Another trend emerges as platforms and tools get more powerful: more people are needed for development so studios tend to grow larger.

Most development studios are contracted to develop games by publishers on a fee-for-service basis, with additional royalties payable for upside participation. However, many publishers also have their own internal development studios, which are typically built through acquisitions of independent developers who have created successful games for that publisher.

B. Publishers

A publisher's key responsibilities are to manufacture, market and distribute the game. A publisher often controls the brand of the game through the intellectual property associated with the product name, storyline, character rights and look-and-feel. Some publishers also control the underlying technology of the game engine software or certain proprietary development tools. The exact role of a publisher varies, as some of them are far more involved in the development of the game than others, orchestrating the development process and aligning it with the marketing strategy. As described below, publishers often advance financing to the development studio to fund the creation of the game. These publishers will assign their own internal producers to each development project to monitor progress against funding milestones, and to ensure that the resultant game meets the publisher's requirements.

Marketing budgets range from as low as USD 20,000 to as much as USD 10 million, and represent another important financial commitment by the publisher. Much of the marketing budget is often spent even before a development studio has completed the game, adding to the publisher's financial risk in the project.

Large publishers typically have their own global distribution channels that are able to place their games with retailers in all major markets, while smaller publishers may only have distribution relationships in a regional market. Distribution is also a separately profitable business for some publishers, and they routinely enter into "distribution only" agreements with other (smaller) publishers to earn distribution revenue. There is also a number of independent distributors that compete for this business. A typical distribution arrangement with a major publisher (or a strong independent) will generally be available for a 20% share of the game's sales revenue in the relevant territory (see also diagram 3).

C. Platform Owners

The interactive entertainment industry is dominated by three platforms: Microsoft Xbox, Sony PlayStation 2 and Nintendo GameCube. Each platform owner primarily targets a different demographic segment; with Nintendo targeting children aged 6 to 14, Sony targeting the broadest range of consumers from age 12 and up and Microsoft targeting adult gamers from age 17 and up.

The hardware platform owners collect royalties for software that is allowed to run on their platform. This represents a significant cost to publishers who wish to sell their game for a particular platform. Typically, platform royalties range from USD 7 to USD 10 per game sold. The PC platform is not considered a proprietary platform and has no associated royalties payable, which significantly reduces the manufacturing cost of a PC game.

All current platform owners are also major publishers and developers of games through their own internal divisions. Frequently, these are built through the acquisition of smaller independent companies leading to an active market for mergers and acquisitions in all aspects of the industry.

D. Content Brands Licensors

Video games are increasingly developed using existing brands made popular in other media, such as *Spider-Man*, *Lord of the Rings* or *Harry Potter*. Content licensors charge the publisher a licensing fee for the use of the brand and typically also receive a percentage of royalties received by the publisher from sales of the game. Large media companies such as Vivendi-Universal and Fox have recently made significant commitments to this growing trend by creating internal interactive entertainment divisions for video games based on their film libraries and other creative content.

E. Other involved companies

Other involved companies include Service Suppliers (advisors, lawyers, accountants, etc.), Software Tool Developers (tools for graphics, sound, etc.), Support Suppliers (who are hired by the developer to provide specialized services like playtesting, sound, effects, etc.) and Distributors.

For a complete overview of all involved parties see diagram 1 on the next page.

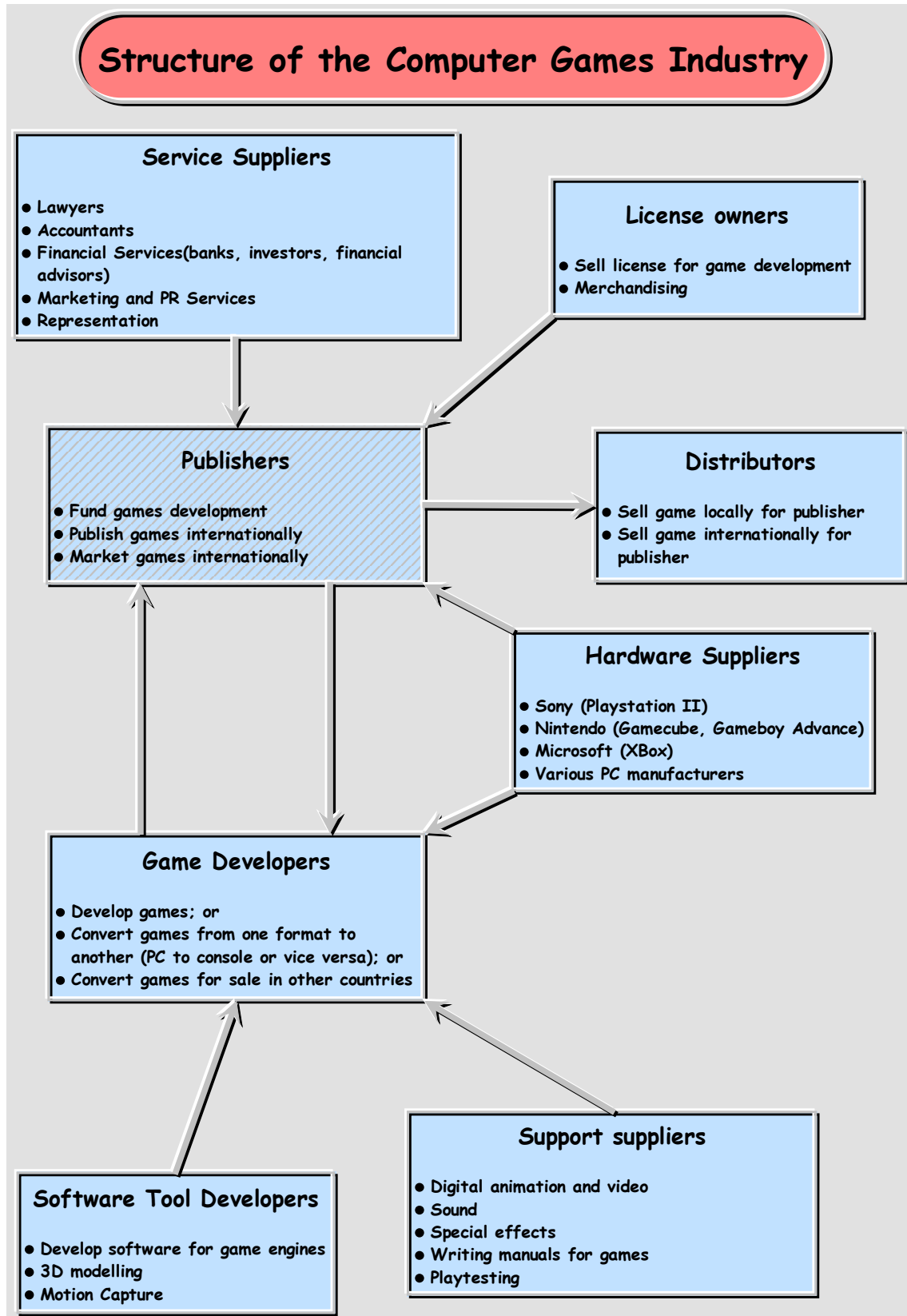


Diagram 1: Structure of the Computer Games Industry

PRODUCT CATEGORIES

The market for console and PC games has become segmented into three major categories based on factors such as cost of production, level of game sophistication and retail price. The major product categories typically referred to in the market consist of high-end “Triple-A” (AAA) games, mid-market “Single-A” (A) games and lower end “Value Titles”.

A. “Triple-A” Games

The distinguishing features of a high-end Triple-A title generally include the following:

- Development Budget - typically €3 million to €10 million, although can sometimes be higher;
- Marketing Budget - in the range of €2 million to €5 million (in addition to the development budget);
- Development Time Period - significant variation by developer and title, although generally in the 18 to 36 month range;
- Retail Price - approximately € 50;

B. “Single-A” Games

A Single-A title shares many of the characteristics of a Triple-A game, although its lower budget will lead to differences in certain areas, such as the following:

- Development Budget - typically €2 million to €3 million;
- Marketing Budget - in the €500,000 range;
- Development Time Period - 12 to 18 months;
- Retail Price - in the range of € 20 up € 50;

C. Value Titles

Until recently, a value title was either a low quality game or a game that was approaching the end of its commercial life cycle. However, because of the increasing power and affordability of software development tools to create art assets and the widespread licensing of sophisticated commercially available game engines, many value titles produced today are reasonably high quality, low cost games produced on an shorter timeline. Some of these games even began life as “mods” (or modifications) of Triple-A titles and are being made by dedicated - and sometimes very talented - amateurs (e.g. Day of Defeat, Counter-Strike).

- Development Budget - typically €200,000 to € 300,000;
- Marketing Budget - since the sale ability of a value title is primarily based on price point rather than promotion, a marketing budget of €40,000 in this category would be considered high;
- Development Time Period - 5 to 6 months;
- Retail Price - approximately €15 for PC products and €25 for console products;

MARKET CHARACTERISTICS AND RECENT MARKET DEVELOPMENTS

Below we have outlined some general features of this market:

Some interesting statistics

- 60% of all Americans played video games in 2002,
- 35% of Americans rated playing computer and video games as the most fun entertainment activity for the third consecutive year
- Computer game industry grows larger than the movie industry with USD 12,7 bln sales
- >70 million Playstations worldwide
- >30 million Playstation 2's
- 4 million Xbox, 4 million GameCubes

There can be only one conclusion: the time that interactive games software was a small scale, marginal business lies far behind us.

Shape of the Industry

Similarities with Film Industry:

- About 1 in 10 titles breaks even or makes money
- Sequels, franchises and licenses are popular
- Few self-published titles: there are fewer small developers as development costs go up

Internet:

- Sales and updates
- Multiplayer versions of games.

A Hit-Driven Entertainment Business

- The interactive entertainment software business is *entertainment* and it is *not a packaged goods business*.
- Games generate emotional responses, and are designed to fulfill fantasies, provide escape from reality, and stimulate the senses.
- Causes of success are intangible.
- Quality is king.
- Consumers are smart. There is a lot of information for consumers available on Internet, television and by word-of-mouth. Those who are creative, instinctive, and who know what a great gaming experience feels like, make hits, not marketing executives.

It is estimated that interactive entertainment sales totaled USD 27 billion worldwide in 2002. Compared to other forms of entertainment, sales of console and PC video games now rank among the largest sectors in the entertainment industry competing head-to-head with other mainstream entertainment products such as movies, books, and music. With comparable size and a growth rate higher than these competing forms of entertainment, we believe the interactive

entertainment software sector will be the most compelling sector opportunity in the entertainment industry over the next five to 10 years.

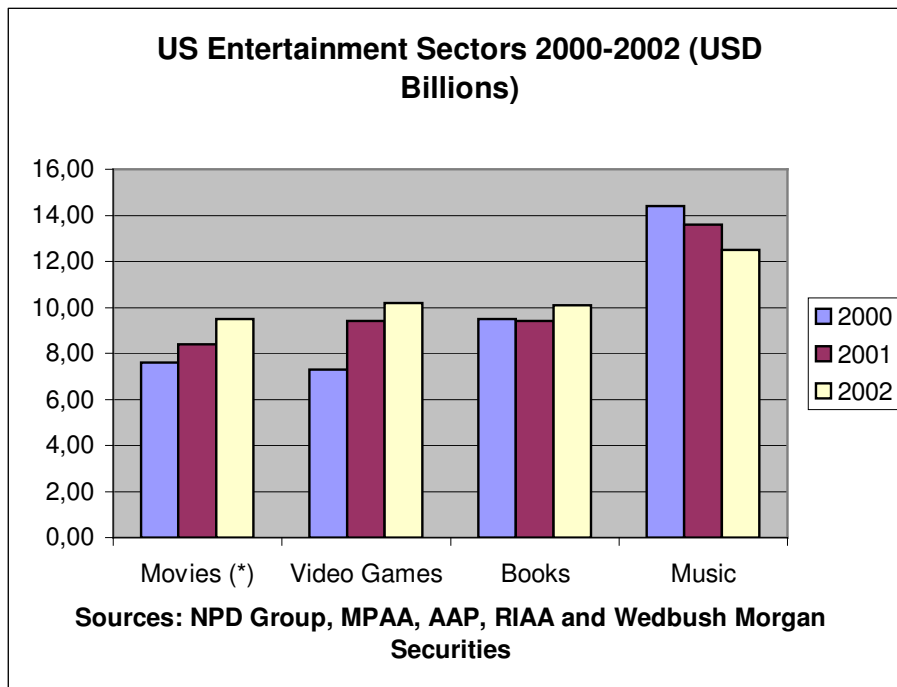


Diagram 2: US Entertainment Sectors 2000-2002 (USD Billions)

(*) Please note that Movies consists of box-office receipts only.

Since 1995, the global leisure software market has almost tripled in value, and there are few - if any - other media markets that can show comparable growth.

In terms of hardware sales in 2002, PlayStation 2 sold 6,3 million pieces in Western Europe, according to Screen Digest estimates. On a global level, it is estimated that Sony had sold more than 40 million PlayStation 2 machines by the end of 2002, giving Sony 74 per cent share of the current 128-bit console market, ahead of Nintendo's 14 per cent and Microsoft's 12 per cent.

The world market for video games is growing at a faster rate than ever before, recent studies are arguing. The three most popular games console systems; Sony PlayStation 2, Nintendo GameCube and Microsoft Xbox have sold 30 per cent more than the previous generation of gaming technology at the equivalent point in time.

Industry Forecast

- It is estimated that the interactive entertainment industry generated worldwide sales of over USD 27 billion in 2002
- The combined U.S. and European software markets are estimated to grow at a 19% CAR over the 2003 - 2005 period.
- By 2004, it is expected that U.S. interactive entertainment software sales to be approximately half the level of movie (VHS and DVD) rentals and sales (approximately USD 20 billion in the U.S. in 2002) and interactive

entertainment sales to surpass US music sales over the next two years (see Diagram 2 for 2000-2002).

- Several demographic trends and market drivers will fuel rapid interactive entertainment software sales growth. The most compelling of these trends is the expanding age demographic of the interactive game consumer, accompanied by an increasing level of disposable income and the propensity to spend that income on entertainment.
- Although we believe that Internet gaming offers the potential for tremendous growth, we do not expect a significant earnings contribution from online gaming from console systems for traditional publishers until adoption of the next generation consoles is widespread (sometime between 2006 - 2010). With reference to PC games this is already a substantial market, with every PC game required to have an online component or being a dedicated online game. However, with some exceptions consumers are not yet used to paying for online gaming.

Overview

The table below provides an overview of the sales data and forecasts of both software and hardware sales.

Sales in USD mio

	1999	2000	2001	2002	2003E	2004E	2005E
Hardware US	2.354	2.016	3.347	3.444	3.731	2.841	2.226
Hardware EU	2.189	1.360	2.069	2.809	3.263	2.505	1.960
Hardware Japan	1.030	2.163	2.146	1.879	2.520	1.698	1.230
Total sales	7.572	7.539	9.563	10.134	9.514	7.044	5.416
Software US	5.319	5.362	5.844	6.723	8.351	10.119	11.359
Software EU	6.700	5.600	5.734	687	8.437	10.236	11.549
Software Japan	4.110	3.661	3.519	5.229	5.738	6.089	5.171
Total sales	16.129	14.623	15.097	12.639	22.526	26.444	28.079

Table 1: Global Software and Hardware sales

Estimates: Wedbush Morgan Securities

THE PRODUCTION AND SALES LIFE CYCLE

In most cases, the production cycle for an interactive game begins when the developer creates a playable demo of the game and offers it to a publisher for evaluation. The publisher then makes a marketing decision as to whether the game will sell, and provides feedback to the development studio regarding modifications that may increase the sale-ability of the game.

Frequently, the publisher will use its relationships with the platform owners to secure agreements allowing the game to be developed for any or all of the hardware platforms, since porting the game to different platforms is relatively inexpensive and increases the potential market for the game. The development cycle of a game depends on the type of game being produced, and can range from six months to as long as three years. Approximately six months before the game is released, the publisher will begin the marketing effort.

A large percentage of new games target release dates to correspond to the Christmas shopping season, which adds an element of seasonality to this process. If the game is to be released on a hardware platform, the game must also be certified by the platform owner before manufacturing and distribution can begin. This technical certification provides the platform owners with the ability to ensure the quality of product available on their platform. Platform owners also require that product for their platform to be manufactured at a licensed replication facility.

The sales life cycle for interactive entertainment software is typically about two years, although hit titles can last much longer. Typically, for the first few months after release the product retails at full price. After this initial period (averaging 6 to 8 months), the product is usually discounted to sell, and when the discount becomes high enough, the product may reach a value title price relative to the new releases entering the market.

Finally, publishers employ a number of methods to extract value from games that are nearing the end of their product life cycle. One method used to maximize sales is to bundle the game with other later-stage games and sell them together. Occasionally, the publisher is able to extract extra value from a late-stage game by signing agreements with original equipment manufacturers such as graphics chip makers or personal computer manufacturers, to bundle the game with their hardware releases. It is important to note that such late-stage methods of extracting additional value from a game are usually only available for PC game titles.

The diagram below provides an insight into the value chain of the industry and the value added in each of the chain-links:

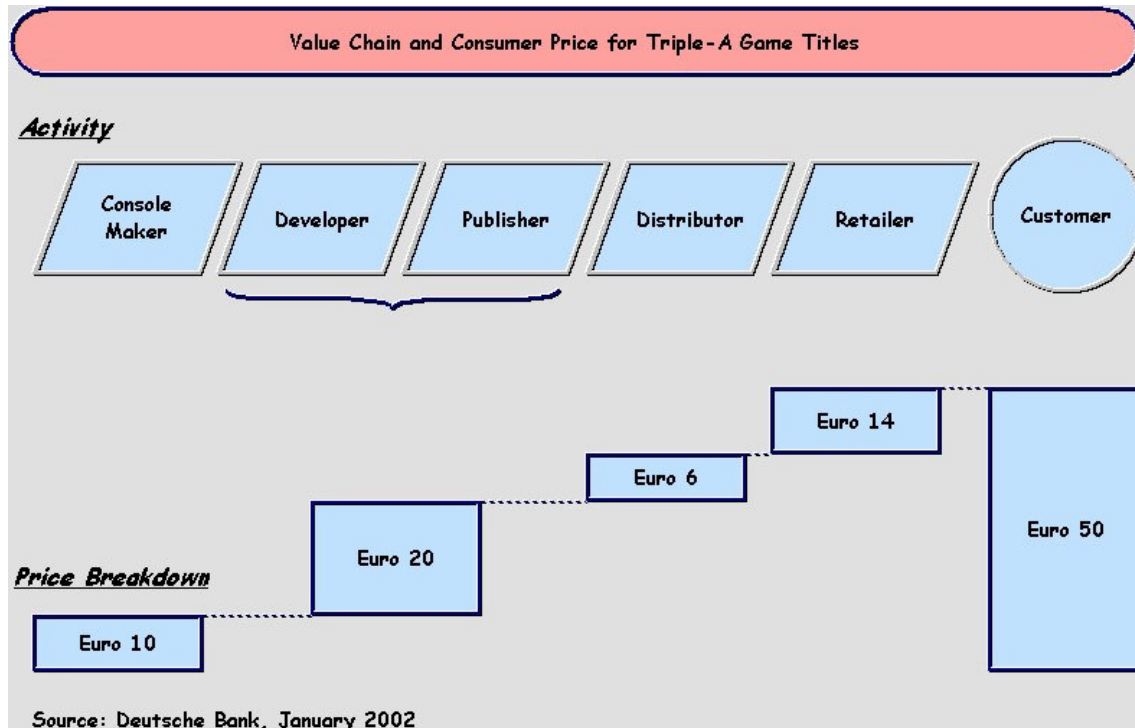


Diagram 3: Value Chain and Consumer Price for Triple-A Game Titles

FINANCE MODELS

Historically, publishers have funded the development costs of game software by using a royalty advance model providing funds from their own internal resources. More recently, however, the publishers' traditional production budgets are proving inadequate. Increased competition now requires publishers to release more titles every year, and the costs associated with developing and marketing a successful Triple-A game have grown.

The combined marketing and development costs associated with a Triple-A title are currently approximately USD 3 million to USD 10 million, as compared to less than USD 2 million a few years ago. The combination of increased costs and a more competitive environment demanding an increasing number of product titles for each platform has led to a financial gap in the production environment.

To meet this gap publishers are increasingly trying to find third party financing. Often, these independent investors and banks will finance development only after the publisher's marketing and distribution budgets have been committed.

The mechanics of the two different financing models are outlined below.

Advance Against Royalties

The royalty advance model has traditionally been the most common method for financing the development of interactive entertainment software. In this approach, the publisher advances the funds necessary to complete a game to the developer, and recoups that investment from royalties collected from subsequent sales of the game.

The agreement would typically provide for a split of royalties between the publisher and the developer, but the royalties allocated to the developer are initially applied to pay back to the publisher all funds originally advanced. Once the developer has been fully paid back, or "earned out", the advance through its share of the initial royalties, further royalties collected by the publisher are shared according to the contracted royalty rate.

It should be noted that since the royalty rates for developers are typically low, very few developers actually earn out their advances. Generally, this is not a major concern for the developers, since they have still received their advance payment to develop the game, which represents their revenues. Any additional royalties received by a developer after a game has earned out are often perceived as a bonus.

Third Party Financing

In a typical third party financing, the investor agrees to fund the completion of a game after the original playable demo has been completed (from the developer's own funds), and an agreement has been entered into with a publisher. In this model, it is the investor who provides financing to the developer as an advance

against royalties and assumes the role of producer to ensure that milestones are met and the project is completed.

In these projects, the publisher has typically already agreed to market and distribute the finished game, often with a committed marketing budget to satisfy the investor. Structures involving third party financing through investors and/or banks have been tried successfully in the US but is still in its infancy, particularly in Western Europe

CONTRADICTION

Looking at the market and its soaring growth rate and current substance it is hard to understand that on average this industry finds it so difficult to find sources of third party finance to fund this growth. There are a number of characteristics of this market that make banks hesitant to enter:

1. Hit-driven business.
If a project turns into a commercial success the revenue-streams are substantial, if they are not, revenues are moderate to low. Banks do not like this, they do not care whether the potential upside is large; they care about the downside (the perceived risk) only. Banks like steady, predictable income streams. This is not surprising, as most banks assume the role of debt provider and do not profit from any upside directly.
2. Term.
In comparison to film financing (a comparable business model) the term of development is long (6-12 months as compared to 2-3 years). The longer the period of funding needs, the higher the risks.
3. Fragmented industry.
The games industry is per definition one of the most international markets when you look at product-characteristics. However, there are no companies except for e.g. Electronic Arts who have the geographical reach to exploit their products fully on a global scale. Due to the hit-driven-nature of the industry, size and scale matters greatly, reducing volatility of income streams and dependency on few titles only.
4. Lack of transparency.
Games companies are normally involved in a range of revenue-splits among hardware developers, publishers, retailers, license holders, and developers and hereby lack transparency compared to other markets.
5. Unknown industry.
The simple fact that the games industry on a worldwide scale developed during the last decade only makes that banks do not have much experience with games producers and developers. Unknown makes unloved.
6. Size.
Most games publishers and especially developers are small. Banks do not like small companies, especially not if the term of the required financing facilities are longer than 1 year and loan amounts are relatively small as well.

Despite the financing difficulties companies in the games industry are currently facing we feel that the investment prospects in this sector are tremendous. We believe that the interactive entertainment industry is in the midst of its largest

growth cycle to date. Investing in a portfolio of listed entertainment companies over the last 12 years for example has produced a 20% CAGR. Trafalgar Pincio can help prospective investors find interesting investment opportunities in this growing market as well as assist emerging companies find new sources of capital.

HOW TRAFALGAR PINCIO CORPORATE FINANCE CAN ASSIST IN RAISING FINANCE FOR GAMES COMPANIES

Since the downturn of the economy and decline of the stock markets the games industry has found it increasingly more difficult to get access to financing sources. Various parties are trying to find financing structures suiting the industry as well as financiers. One of the recent trends is financing structures that use elements of the film industry financing.

We can present you with an innovative structure that addresses and mitigates a number of the concerns that banks have in general with the debt financing of the companies active in the games industry. Moreover, at the same time this structure helps publishers and developers address risks during the development and marketing phases of a game. Our financing structure provides an integrated solution for the financing difficulties of the games industry

Through this structure and with our elaborate network in both the banking and investment industry as well as in the games business we believe that Trafalgar-Pincio is your best partner in raising the money to finance your games and to fuel your company's growth.

Trafalgar Pincio offers the following services:

- Raising Finance and Financial Restructuring
- Mergers & Acquisitions
- Structured Game Financing
- Business Valuations
- Strategy Assessment

For more information about Trafalgar Pincio Corporate Finance and its structured financing solutions, please contact one of our executives below or visit our website at www.trafalgapincio.nl.

REFERENCES AND PUBLICATIONS

For the preparation of this document we extensively used material that is published worldwide. The most important publications that were used are listed here. These provide excellent further reading.

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