Core activities:
Games development
Publishing
Distribution
Retail

Related activities:
Video sequences (using actors, directors, crew)
Music soundtracks
Digital TV gaming
On-line gaming
Gaming for mobile phones
Computer manufacture, distribution and retail
Games console manufacture, distribution and retail
Merchandise, e.g. clothes

Related industries:
Television
Software
Internet
Film & Video
Music
Retail
Publishing
Sports
Over the last 20 years the entertainment software business has matured from a cottage industry with a small hobbyist consumer base to one dominated by publicly-owned global publishers selling to the mass market. The market is split into two sectors: Consoles and PCs.

**The Console Market (Video Games)**

Console machines plug into the TV and are played using joypads. The best-selling titles sell around 300,000 copies in the UK. Typical retail prices for a hit console game are between £29.99 and £39.99. The prices are raised by the fact that all publishers must pay a royalty to the hardware manufacturer (Sony, Nintendo, Sega) on every game replicated.

**The PC Market (Computer Games)**

The benefit of the PC is that it is “open” and publishers pay no fee and seek no permission to make PC games. The fact that a PC has a mouse and a keyboard also means that cerebral strategy games are more suited to the platform. The drawback of the PC is its instability. Games crash and often will not play without the addition of a graphics or 3D card. As a result, PC games are mostly the preserve of a dedicated niche of more technically inclined gamers. Hit games sell for between £24.99 and £29.99. The best-sellers ship over 150,000 in the UK, but the vast majority of PC games sell a fraction of this amount.

**The Global Market for Video Games**

The video games market is now worth well over £10.6 billion ($16 billion) a year worldwide, double its value in 1996. In terms of consumption the UK is the third largest individual country market after the US and Japan. The UK also enjoys success in producing games (see subsequent sections). In 1998 UK games exports were worth £503 million.

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1 Screen Digest.
### GLOBAL INDUSTRY REVENUES, 1999

<table>
<thead>
<tr>
<th>MARKET</th>
<th>SIZE (£ BILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>3.9</td>
</tr>
<tr>
<td>EUROPE</td>
<td>3.9</td>
</tr>
<tr>
<td>JAPAN</td>
<td>2.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9.9</td>
</tr>
</tbody>
</table>


### UK MARKET SIZE

The UK market for games has grown rapidly since the present generation of console machines (PlayStation, N64) were launched in the mid 1990s. The machines reached their sales peak in 1999, taking the industry to the brink of £1 billion in annual revenues.

In 2000, with the industry balanced between these older formats and expensive new models in limited supply, sales were projected to fall very slightly before building to unprecedented levels in two to three years’ time.

### TOTAL MARKET VALUE OF UK LEISURE SOFTWARE, 1997-2000 (PROJECTED)

<table>
<thead>
<tr>
<th>(£ MILLIONS)</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000 (PROJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSOLE/HANDHELD</td>
<td>365</td>
<td>489</td>
<td>574</td>
<td>518</td>
</tr>
<tr>
<td>PC</td>
<td>278</td>
<td>342</td>
<td>395</td>
<td>428</td>
</tr>
<tr>
<td>TOTAL</td>
<td>643</td>
<td>831</td>
<td>969</td>
<td>946</td>
</tr>
</tbody>
</table>

European Market Size
The UK console market is easily the biggest in Europe; its market for PC games is slightly smaller than Germany’s (in terms of unit sales) but higher prices make its value higher.

Overall, the European games market is growing prodigiously. In 1999 it was worth £3.9 billion.

<table>
<thead>
<tr>
<th></th>
<th>(£ MILLIONS)</th>
<th>PC</th>
<th>CONSOLE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td></td>
<td>394</td>
<td>575</td>
<td>969</td>
</tr>
<tr>
<td>GERMANY</td>
<td></td>
<td>361</td>
<td>281</td>
<td>642</td>
</tr>
<tr>
<td>FRANCE</td>
<td></td>
<td>224</td>
<td>321</td>
<td>545</td>
</tr>
<tr>
<td>SCANDINAVIA</td>
<td></td>
<td>325</td>
<td>164</td>
<td>489</td>
</tr>
<tr>
<td>ITALY</td>
<td></td>
<td>137</td>
<td>197</td>
<td>334</td>
</tr>
<tr>
<td>SPAIN/PORTUGAL</td>
<td></td>
<td>100</td>
<td>188</td>
<td>288</td>
</tr>
<tr>
<td>BENELUX</td>
<td></td>
<td>116</td>
<td>88</td>
<td>204</td>
</tr>
</tbody>
</table>

**Source:** Green, T., and Keen, B., 1999, Interactive Leisure Software Market Assessment and Forecasts 1999-2003 (London, Screen Digest). Conversion $ = 0.6 GBP.

**BALANCE OF TRADE**
British games sell well all over the world, outweighing the amount spent by UK gamers on imported products. Titles such as the *Tomb Raider* series, *Goldeneye 007*, *Donkey Kong 64*, *Grand Theft Auto*, *Worms*, *Driver*, *Croc*, *Colin McCrae Rally* and many others have sold many millions. UK studios are also frequently employed by the world’s publishers to convert games from one format to another or to develop games based on existing properties.

<table>
<thead>
<tr>
<th></th>
<th>(£ MILLIONS)</th>
<th>EXPORTS</th>
<th>IMPORTS</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEISURE SOFTWARE</td>
<td></td>
<td>503</td>
<td>284</td>
<td>219</td>
</tr>
</tbody>
</table>

EMPLOYMENT
The UK games industry employed around 21,500 in 1999, the majority of whom were engaged in retail or in the development of new games.

Most games studios comprise one small team employing between 5 and 15 people. However, the rise in cost and sophistication of games has seen the emergence of around 30 highly capitalised studios employing upwards of 50. Half of them have more than 100 workers.

Elsewhere employment in the industry comprises retail (mostly in high street multiples and around 400 small independent stores), publishing and distribution. The rest is made up of supply activities such as packaging, legal services, duplication, press and print.

EMPLOYMENT IN THE UK LEISURE SOFTWARE INDUSTRY, 1999

<table>
<thead>
<tr>
<th>Category</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPMENT</td>
<td>5,906</td>
</tr>
<tr>
<td>PUBLISHING</td>
<td>2,628</td>
</tr>
<tr>
<td>DISTRIBUTION</td>
<td>1,049</td>
</tr>
<tr>
<td>PERIPHERALS</td>
<td>270</td>
</tr>
<tr>
<td>RETAIL</td>
<td>8,346</td>
</tr>
<tr>
<td>PACKAGING/PRINT</td>
<td>1,200</td>
</tr>
<tr>
<td>OTHER</td>
<td>2,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21,399</td>
</tr>
</tbody>
</table>


INDUSTRY STRUCTURE
As the industry gets bigger it moves further away from localised, hobby-led roots and closer to the global oligarchy which defines the music and film businesses. With development budgets soaring past £2 million, publishers need to exploit global markets and to secure internationally recognised licences. They are doing so with the backing of the money markets – merging and acquiring to stay in the game. Meanwhile the larger development studios are also looking for independent means of finance in order to minimise their reliance on publisher finance.

There are around 250 development studios in the UK, although the vast majority of these companies are small and founded by former employees of established studios; however, in recent years a handful of large independent studios have emerged. These include in-house publisher studios, specialist conversions houses and independent studios creating original products.

The UK is arguably the games industry’s most important European territory and is therefore home to subsidiaries of almost all the world’s major publishers. Most of the publishers operating in the UK are US-owned; however, some are Japanese, some French and the rest are UK-owned companies.
UK distribution is dominated by three large players, namely Pinnacle, Gem and Centresoft. These three companies handle products for most industry publishers.

The remaining distributors comprise medium-sized companies such as Koch Media, Interactive Ideas and Planet (whose exclusive accounts are generally peripherals and non-games software) plus a collection of small sub-wholesalers.

There are thought to be around 6,000 retail outlets for video games and CD-ROM in the UK, of which up to 600 are independent. The trade’s most powerful retailer is the specialist games chain Electronics Boutique (EB). It commands just under 25% of the market.

Also growing are supermarkets that currently stock games in some form, just as they are now active in music and video.
REGIONAL DIMENSIONS
Locality is not significant to UK developers, given the isolated and creative nature of their work – and the fact that so much of the workflow is electronic. Nevertheless some areas have attracted clusters of studios. This tends to follow from the location of one major company in the area which spawns a number of breakaways. Examples include: Warwickshire (Rare, Codemasters, Blitz, Smart Dog), Merseyside (Psygnosis, DlD, Evolution, Rage, Bizarre Creations, Curly Monsters, Teeny Weeny, Surreal, Spiral House), Guildford (Bullfrog – now moved, LionHead, Fiendish, Criterion, Glass Ghost, Lost Toys, Mucky Foot, Kuju), and Glasgow/Dundee (Vis, Red Lemon, Digital Bridges, Games Kitchen, DMA, Steel Monkeys, Visual Science).

INTERNATIONAL CRITICAL ACCLAIM
British developers enjoy an excellent reputation in overseas markets. Their products, on both console and PC, sell well in the major markets of Europe (France and Germany) and the US. However, Japan remains elusive as it does to all outside developers (the Japanese market is dominated by home-grown games).

The new generation of machines such as PlayStation 2 is more complex technically than any predecessor and it is generally accepted that British development studios will be among the first to master them. UK companies are already among the most visible of the so-called “middleware” vendors for PlayStation 2. Middleware is the name given to those ready-made software tools which can be purchased by developers in order to speed up their projects. Already UK studios Criterion and Mathengine are selling their middleware tools to studios all over the world.

Technical competence also attracts the world’s publishers when they need a studio to “port” a game from one format to another. For example, a company may have had a hit on PlayStation which it wants to put out on N64. This is a tricky task, not too creative, but hard to accomplish. Over the years specialist “conversions” studios in the UK have been employed to port some of the industry’s biggest games.

Selected UK-Developed Successes
Among the many British games which sell well all over the world a handful have become truly outstanding successes. They include:

- **Driver:** Reflections’ driving title has sold more than 4 million in less than two years. Reflections is owned by Infogrames (France).
- **TOCA/Colin McRae:** These two rally titles are published by the private UK company Codemasters. They have jointly sold 4.2 million.
- **Goldeneye 007:** Rare’s Bond title is considered one of the best games ever made. It has sold over 7 million copies in just over two years for Nintendo (which owns 25% of Rare).
- **Tomb Raider:** The Lara Croft phenomenon has sold 21 million games across four instalments for Eidos.
SECONDARY ECONOMIC IMPACT
As games technology has evolved it has broadened the secondary impact of the industry it serves. The obvious beneficiaries are retail and publishing, which now employ 8,300 and 2,400 people respectively in the UK. Elsewhere there are obvious ramifications for those employed in film and TV. Present generation console games typically include video sequences which require film talent (actors, directors, crew) and music soundtracks.

POTENTIAL FOR GROWTH
The launch of a new generation of consoles (Sega Dreamcast and Sony PlayStation 2, along with the imminent arrival of Microsoft Xbox and Nintendo GameCube over the next 18 months) has re-acquainted the games industry publishers with the unique challenges of the turn of the console cycle. The problem can be summed up simply: how to strike a balance between developing projects for new, untested machines or keeping faith with existing platforms whose market could collapse within months. The significance of these investment decisions is compounded by four more factors:
- growing cost of software development;
- the need to source third party licences;
- sales dominated by a handful of “triple A” titles; and
- few opportunities for incremental sales.

UK DEVELOPMENT INVESTMENT

<table>
<thead>
<tr>
<th>(£ MILLIONS)</th>
<th>1998</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVESTMENT</td>
<td>243</td>
<td>332</td>
</tr>
<tr>
<td>ANNUAL GROWTH</td>
<td>36.5%</td>
<td></td>
</tr>
</tbody>
</table>


IMPACT OF E-COMMERCE/INTERNET/TECHNOLOGY
New consoles promise all-round entertainment with DVD and broadband Internet connections. The arrival of 128-bit machines represents more than just the customary improvement in technology ushered in by previous platforms. Gamers will see clear differences in graphical sophistication, speed and photorealism, but the radical change signified by the next generation will be defined by their ability to run DVD and their network capability. DVD will make the games console a video player. Indeed, in Japan DVD software sales leapt from 1 million to 1.9 million in the month PlayStation 2 was launched.

Meanwhile, the emergence of gaming on non-traditional platforms (digital TV, online gaming and especially mobile phones) could change the way games are played and introduce hitherto neglected demographic groups to the world of electronic games.

Wireless gaming on mobile phones: virtually every publisher and developer in the trade has a WAP project in development – or has at least embarked on research and development into the technology. The foremost reason for interest is the sheer size of the potential user base. Current estimates suggest there are 24 million mobile phone owners in the UK alone. There could be more than 1 billion users worldwide by 2003. The industry is also attracted by the low cost and lack of barriers to entry involved in WAP development. Finally, WAP may sidestep the billing problems presented by “conventional” online gaming. Whereas Internet users are uneasy about credit card payments, phone users may be more accepting of a small premium added to their monthly phone bill.

Online play: making money from online gaming remains elusive. Online games aggregators such as Won.net,
Gameplay (via Wireplay) and Barrysworld do not charge for play and rely on advertising and sponsorship to generate revenue. Gameplay admits that its online gaming service is really a tool to generate traffic to its e-commerce site and to build communities. Meanwhile publishers put an Internet multiplayer option in their games to sustain boxed sales. Today, the vast majority of titles support online play by routing users to aggregators or, occasionally, to purpose-built servers. In reality only a handful have any real longevity online. At present the dominant franchises are Quake, Half-Life, Unreal, Diablo, Age of Empires, Command & Conquer and Homeworld.

Gaming on TV: since the launch of digital TV in the UK playing games via a set top box through the television has become a reality. The UK’s interactive TV channel, OpenTV, which is available on SkyDigital, says games are the most popular destination on the service. Its seven games attract 1.2 million plays a week and 40% of its players are women.

E-Commerce: Current Market Climate
Despite the great clamour surrounding e-commerce, the actual sales generated from on-line channels by the industry in 1999 were negligible. When interviewed a cross-section of UK publishers and distributors confirmed that online sales represented a fraction of 1% of total industry revenues in the UK. However, the consensus is that e-commerce will represent 10% of industry sales in three years’ time.

E-commerce offers publishers a much-needed opportunity to sell the full range of their catalogue. Shelf space is especially limited in retail sites for the games industry. There is no such thing as a games store with genuine product depth, especially when compared with the music retail sector, but it is a fast-turning marketplace with little need for a “back catalogue”. Most consumers want new games, therefore there is little benefit in keeping old ones available.

More and more UK games publishers sell from their own websites; however, sales are minuscule – publishers say they sell in single figures per day. The main UK retailers of games sell titles directly from their websites. A handful of specialist web retailers have also sprung up in the last two years although, again, their combined sales are small: each is equivalent to an independent software store.

Growing the Sector – Points for Consideration
The games business is technology-driven and depends on the continued introduction of faster and more graphically sophisticated hardware platforms. This means that leisure software is an inherently dynamic business, subject to technology and product life cycles of limited duration that have resulted in clear phases of market peaks followed by troughs.

British innovation in interactive leisure software development has not been matched by a British willingness to invest. In fact, only two of the top 20 publishers in the UK in 1999 were British. This situation will probably worsen. The fact is, the London Stock Exchange is not prepared to back “Britsoft” with the same vigour as do NASDAQ, the Nikkei or the Bourse for their respective industries.

One-stop e-commerce portals are needed. Although a handful of publishers sell off their own web sites, this model also ignores the fact that consumers tend to want aggregated sites where they can shop for a whole range of products, play online games, download content, read reviews, and enter competitions.

Looking to the long-term, when games can be downloaded directly into the user’s machine, it is possible that developers may bypass publishers and post their games on a dedicated or integrated site, just as some musicians already do with MP3 files.

In terms of data and research, the Screen Digest report, commissioned by the trade body ELSPA, has done much to redress the glaring lack of reliable numbers and analysis in the business. However, gaps still remain in the area of development. This is such a diverse and disparate sector that an exhaustive audit remains elusive.