



Questionnaire 2011:

Illegal Downloading, DRMs, and Deus Ex: Human Revolution

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Purpose

"We want to encourage and grow the PC gaming industry to offer multiple choices to the potential customer. Creating a Digital Playground where sharing is open to downloaders as well as the publishing companies!"

Illegal downloading of digital media has always been a double edge sword. On the one hand it is one of the easiest and most convenient methods of obtaining any digital media; for the publisher this offers quick, cheap, and the mass market. On the other hand, if publishers see no healthy returns they will see no incentive for releasing their products.

Specifically we are referring to PC gaming media, movies and music have little choice but to fight piracy all the way. At least gaming companies have a console option for releasing their games. Which is what is happening more frequently, as publisher's release games to the Xbox360 and PS3, then many months later if they decide to, will release for the PC!

However after many decades of piracy, there has to come a point when the PC Publisher will say enough. We are at the edge!

This questionnaire was designed to find out about illegal downloading habits. Using Deus Ex: Human Revolution (Released on: 23rd Aug 2011) we set out to prove our Anti-Piracy strategy that could please both illegal downloader and publisher.

The biggest question we were attempting to answer was would they purchase digital downloads from the p2p network?

Original Questionnaire

The original questionnaire was longer, at one point over 50 questions long. This was trimmed down to encourage more people to answer. With an extra two pages, with questions on Internet service providers and the user's computer specifications. The missing questions are below:

Computer Specifications

Is your Main Gaming computer a Self-Build or Store Bought?:

How many Computers do you have?:

How long have you had your current gaming computer?:

Is your machine Over Clocked?:

Did you Over Clocked it?:

Current Operating System?:

CPU Model and Make?:

What is your Graphics Card?:

Computer Memory?:

Internet Service Provider

Who is your Internet Service Provider?:

What type of Internet connection is it?:

Your Download connection speed?:

Your Upload connection speed?:

Are you getting the service speeds provided?:

Rate your ISP?:

Comments on your ISP?:

Do you use any torrent protection services?:

How much bandwidth do you use for downloading?:

The Opportunity!

On the 31st of May 2011, a pre-build release of Deus Ex: Human Revolution was illegally uploaded and downloaded by millions. This game contained the first four levels of the game, and was fairly error free.

Our anti-piracy strategy allows the illegal downloading community to try the game. The illegal downloader gets the choice and it safely exposes a PC game to millions of customers that want to purchase it.

Because the pre-build existed; this gave us an opportunity to take a bold move and run a trial version of the whole Anti-Piracy strategy. This involved taking the game files and altering the crack, which was freely provided by the cracking group ALI123.

The pre-build version was modified to allow the player to experience the first two levels. But upon entering the third level the game would automatically send them to a website to answer a questionnaire.

There were a total of six versions of the game repacked into an ISO image, all under the guise of well known groups both from the scene and the P2P illegal downloading networks. An ISO Image is a virtual DVD that can be played from your hard drive or burnt onto a blank DVD.

The first and official released date of Deus Ex: Human Revolution was set for the 23rd of August 2011. The experiment had an extremely low cost with minimal monitoring. The biggest resource was to make sure everything was set up correctly beforehand.

Official Release: 23rd Aug 2011

The first wave of the experiment was released on the night of 22nd August, and almost immediately p2p users began downloading. Every day, over the next 5 days, more of our torrents were uploaded for the PC version of Deus Ex: Human Revolution.

We flooded areas of the torrent network and boosted the downloading speed to encourage greater numbers. The idea was to encourage downloaders; to play, to enjoy, but ultimately make up their mind if they would buy it or not.

Eventually a working crack was released onto the p2p network, a lot later than expected, as it took a day. Noted to be released on the 24th but it was difficult to be sure, as the two earlier releases were reported to be "Nuked". The two groups responsible were 3DS and ALI123, both part of the p2p scene.

Questionnaire: (www.apsquestion.com)

There were over 900,000 unique visitors to the questionnaire. Over 1 million illegal downloaders of the trial version of Deus Ex: Human Revolution. Each of them were allowed to play the game until the 2nd level and then directed to www.apsquestion.com

The questionnaire closed on the 12th of September, some 3 weeks after the release date. Questions came in three categories illegal downloading, DRMs, and the current game Deus Ex: Human Revolution.

List of Questions asked:

Illegal Downloading

Eight questions on the illegal downloading habits of those who download PC games. Such what types of media they download, and how much?

Q1) Why do you illegally download?:

Q2) What is your opinion of illegal downloading and why it has become so popular?:

Q3) What Torrent sites do you use for the downloading of PC Games?:

Q4) What File Hosting sites do you use for the downloading of PC Games?:

Q5) How much do you download?: (Per month!)

Q6) What types of Digital Media do you download?:

Q7) How many PC games do you illegally download?: (Per month!)

Q8) Do you use any Torrent Protection services?:

Digital Rights Management

Seven questions on Digital Rights Management, and how they affect customers, illegal downloaders, and digital pirates? Also asking what, if anything, might deter people from downloading illegally?

Q1) Please Rate the following DRM systems?: (SecuROM, SolidShield, Steam, UbiDRM, and EACore)

Q2) Do you think DRM systems work?:

Q3) Do you think PC Game Publishers should use DRMs?:

Q4) Do DRMs encourage you to buy?:

Q5) If DRMs were "uncrackable", would you buy PC games?:

Q6) What would work?:

Q7) Any comments to add on the above?: (Any comments on any DRMs? What would work? What would not? Will you buy?)

Deus Ex : Human Revolution

The last eight questions are focused on Deus Ex: Human Revolution, what people thought of the game? How much would they buy it for and what is it worth? Also getting an insight into the perception of the companies that produce it?

Q1) How many PC games do you buy?: (Per month!)

Q2) What do you think about the current selection of PC Games?:

Q3) Have you bought Deus Ex: Human Revolution?:

Q4) How much would you pay for it?: (The MSRP on Release date: €44.99 or \$49.99)

Q5) What score would you give Deus Ex: Human Revolution?:

Q6) Was there anything you did not like in Deus Ex: Human Revolution?: (Was there any part you did not like... Gameplay, Controls, Playability, Story, Graphics? Let us know!)

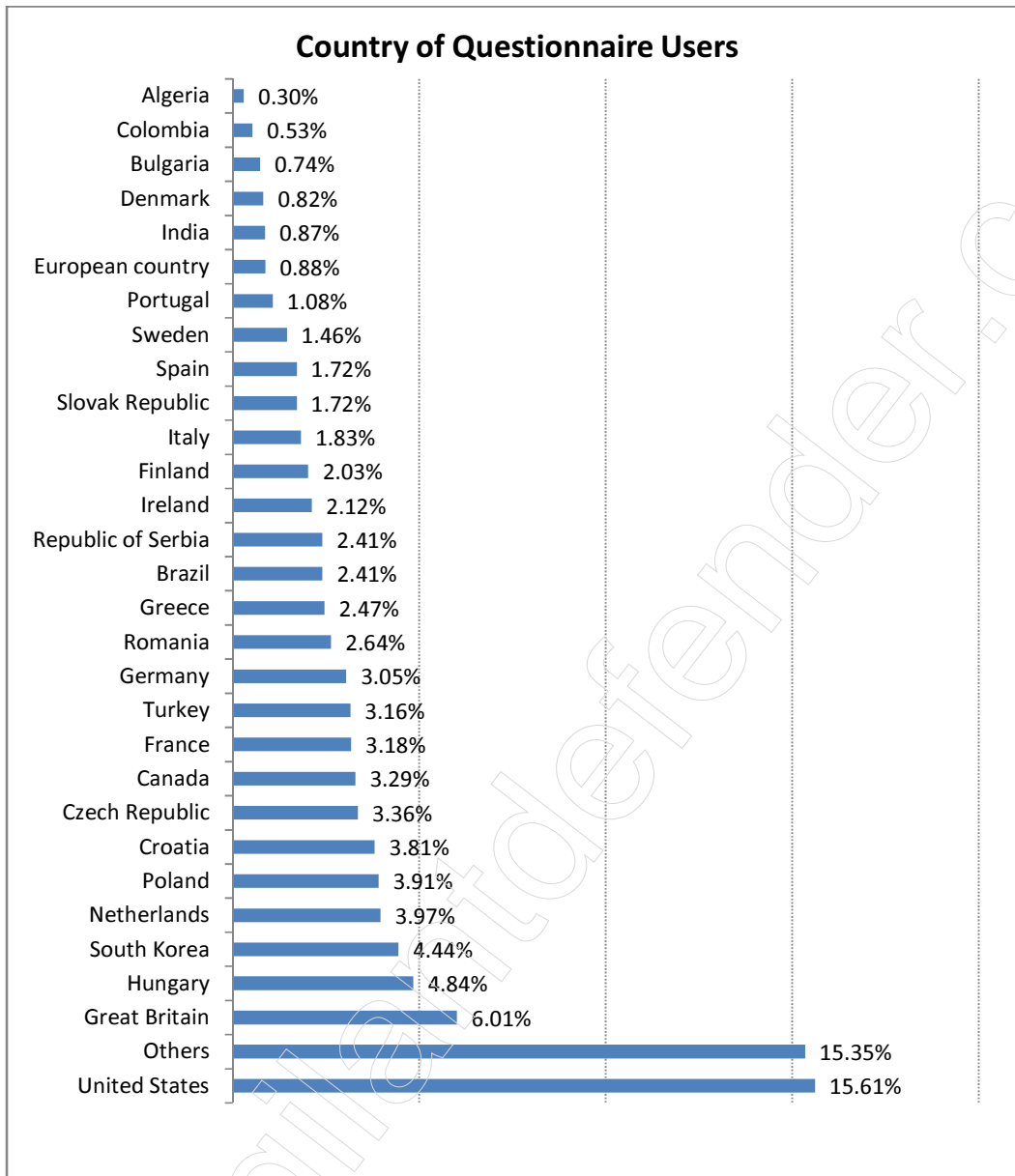
Q7) Please rate Eidos as a Developer?:

Q8) Please rate Square Enix as a Publisher?:

General Information



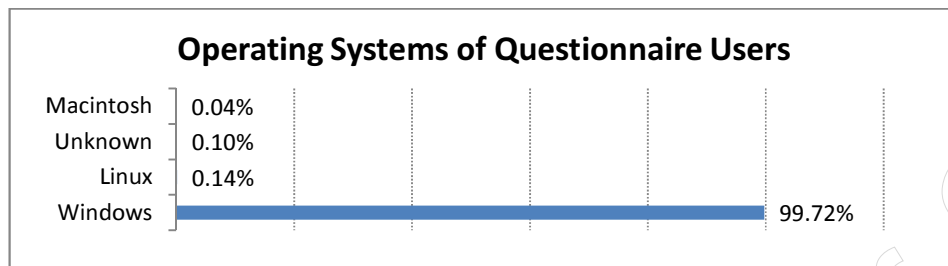
The above graph shows the distribution of visitors per day from the 22nd of August to the 12th of September 2011. The graph shows a normal distribution curve similar to the illegal downloading habits of downloading torrents. You can see the peak on the 30th of August at 96.7 k users, declining rapidly until the 12th when the experiment stopped.



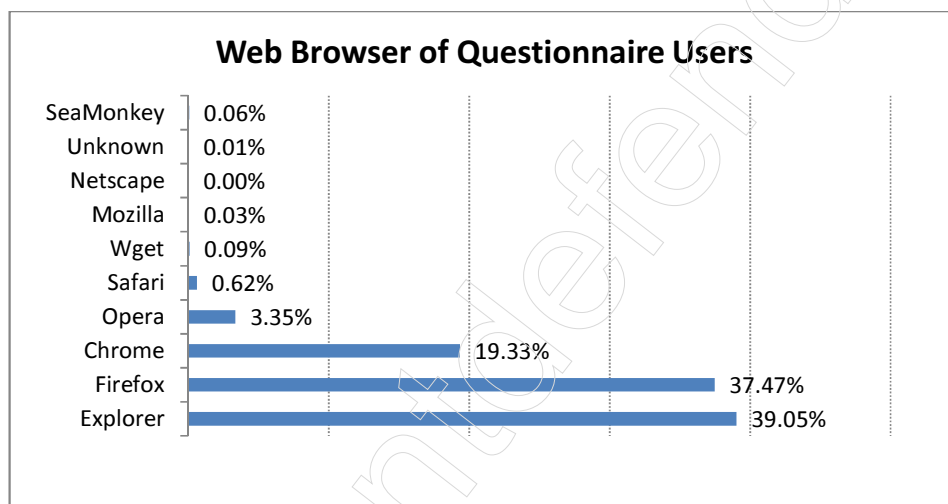
This is a breakdown of the user countries, which downloaded the game and visited the website. However it should be noted that the trail version was only available in English, even though the illegal download name might have suggested otherwise.

From this you can see that the questionnaire was accessed the most from the United States. The questionnaire main language was English, though there was a translating function. It should be noted that this is not a reflection on the downloading habits of any particular country, though it may be similar.

Other Information, not included on the website

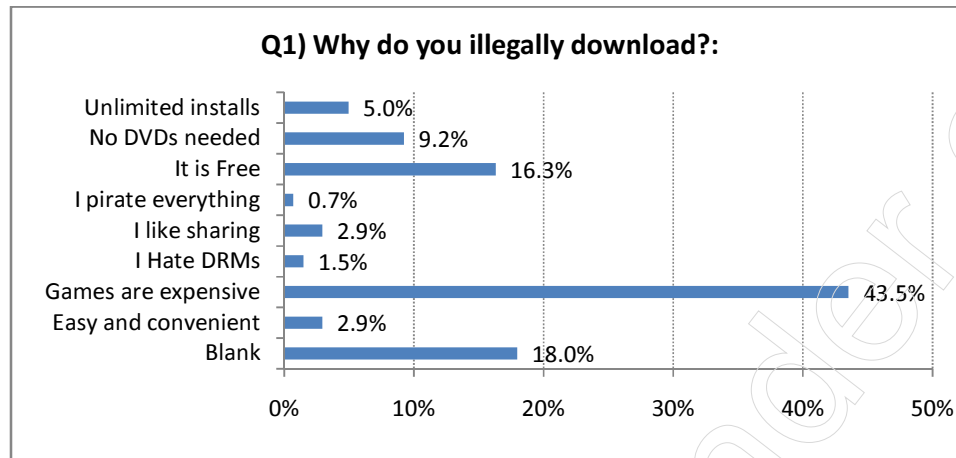


The graph shows that most illegal downloaders (99.72%), who answered the questionnaire, use windows operating systems.



This shows that most illegal downloaders, who answered the questionnaire, prefer the web browser Internet Explorer (39.05%), Firefox (37.47%), and Chrome (19.33%).

Illegal Downloading



It is clear that 43.5% of potential customers believe that PC games are too expensive, which seems counter intuitive when they are often much cheaper than Console versions of the same game. However, Console games from the customer's point of view are better value as they are able to trade in and recoup some cost from the retail shops. Retail shops do not accept trade in PC games due to restrictive DRMs. This limits customer choice and makes buying PC games less attractive.

Illegal downloading has affected the perceived worth of a game and driven the price down. If people are constantly bombarded with free choice, it makes it hard for products to be noticed and also drives down the worth of the product. Also there are regional issues, as games are sold at a very similar price regardless of the economic factor in that country.

From the graph we see that the negative aspects score very low, of why people illegally download, with the highest "Its Free" at 16.3%. The negative aspect being things that cannot be resolved or show that it will not generate revenue. It's Free, I pirate everything and to lesser extents I like sharing, I hate DRMs, and Easy and Convenient. This goes some way in showing that illegal downloaders can be potential and loyal customers.

Q2) What is your opinion of illegal downloading and why it has become so popular?:

There were many answers but the majority of them fell in to these categories

- To try before buying.
- Very assessable, easy to do.
- Unlimited installs.
- Games are too expensive.
- Do not have the money, not enough disposable income.
- DRM issues, technical problems with getting games to work.

Some of the Responses:

"Its popular because it became easy to do."

"I dont think it is acceptable to download, it's just that it is possible. As i can[not] afford to buy everything i download it. In fact there is some game i dont even finish, it would be stupid to pay for it when you can download it... Some time when i really the game i buy it like it happens recently whit modern warfare II, forged alliance and supreme commander."

"its not acceptable, just trying it out. if i like i buy, if i dont like, i don't buy."

"Only download to try games, I buy if the game is good, blame it on the game producers I guess, for not making proper demos lately."

"In some parts of the world, typically Eastern Europe, it's because (PC) games are too expensive compared to people's salaries. Also, DRM methods become more and more obtrusive, which frustrate people without having the desired effect of making more people pay for the product. Other than that, reasons vary."

"Currently do not have enough disposable income to support my gaming habit, if I could afford buying the game I would."

"Game price differences even in digital media just because of location. No if games are good enough then they will be purchased. It will not stop until the big corps adjust their models."

"Não gostaria que fosse ilegal. Mas sim mais barato, os lançamentos são muito caros, e eu não tenho condicao de comprar todos que eu jogo. (Do not want to be illegal. But launches are very expensive, and I cannot buy all that I play.)" [Translation altered to read correctly.]

"Online purchasing without DRM is the key, GOG.com, but for new games... Convenience of a simple download, no DRM, no proprietary download-managers and a well-designed clutter-free website..."

"j'achete plus de 16 jeux par ans, cela me permet de faire le bon choix (I buy more than 16 games a year, it allows me to make the right choice)"

"its try and then buy if you like it, I buy games like Starcraft 1&2, warcraft 2&3, Heroes of might and magic 2,3,4&5, Mass efect 1&2 and Dragon age 1&2, all originals with boxes, cause THEY ARE GOOD GAMES !!!!!!"

"je to dostupnejsie a lacnejsie (its more accessible and cheaper)"

"easy to do and videos games too expensive for short time play (8h)"

"No. Piracy will never stop. Evrybody have own reason "Why?" do they do what they do. BTW. I buy games from small game development studios to make'em "spin"."

"it is popular because games are to expensive and new rules about only 1 install on 1 pc is stupid"

"I acutaly wouldn't condone it, yet i do it."

"I Think it's fine."

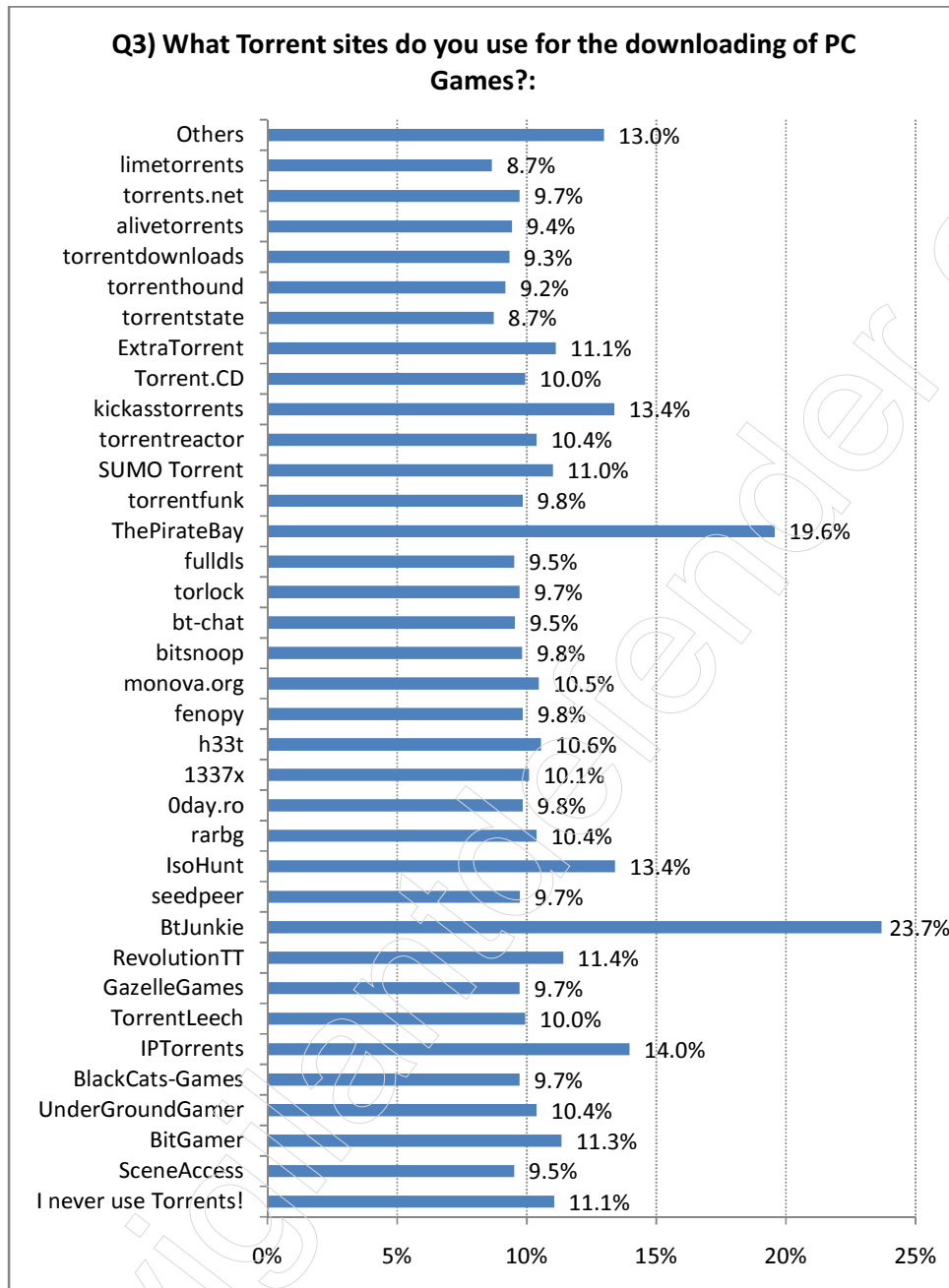
"i dont give a fuck about these rich gaming companies they dont care about us either they only want money and im not gonna give it to them"

"Less money for the corporate uberlords, you pay shit salaries to you asian sweatshop workers, money in this is unfairly distributed, you guys make enough money from advertising and sponsoring anyways."

"New games are expensive so i will not pay 100 dolars for one game" [We suspect this is Australian or New Zealand dollars!]

"Games are too expensive. They should cost at most 25 euro"

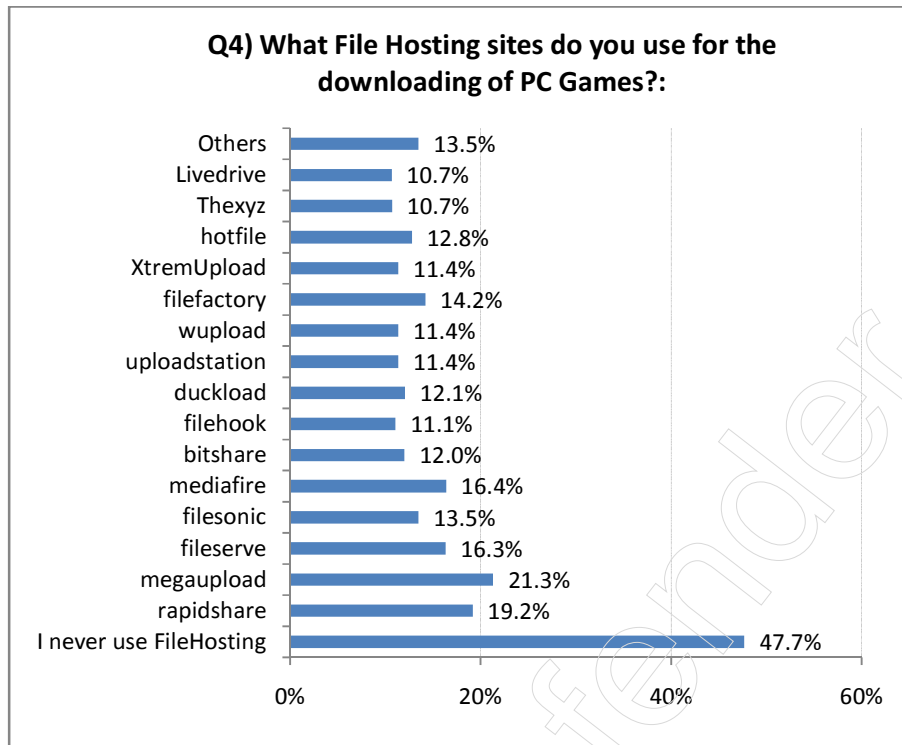
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You can see that the most popular public torrent sites are BtJunkie (23.7%) and The Pirate Bay (19.6%). The next two most popular are IsoHunt and Kickasstorrents (both at 13.4%).

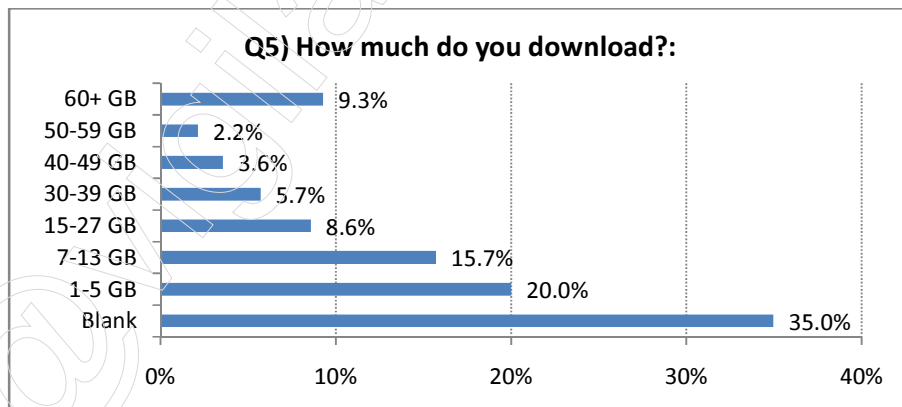
These are similar to the Torrentfreak report, <http://torrentfreak.com/top-10-most-popular-torrent-sites-of-2011-110105/>. While Torrentfreak deals with all illegal downloaders, our questionnaire specifically targets ones that mainly download PC games.

The most popular Private torrent sites are IPTorrents (14%), RevolutionTT (11.4%), and BitGamer (11.3%) .



What this suggests is that downloaders of PC games prefer to use a bittorrent client when downloading. However, when file hosting services are used, the most popular are MegaUpload (21.3%), RapidShare (19.2%), MediaFire (16.4%), and FileServe (16.3%).

We believe that downloaders will use this distribution system sparingly as it requires a lot more user input. Possible reasons for using file hosting services are downloaders have access to a high speed network, they are just downloading updates for a game, or they might need quick access to a small file.

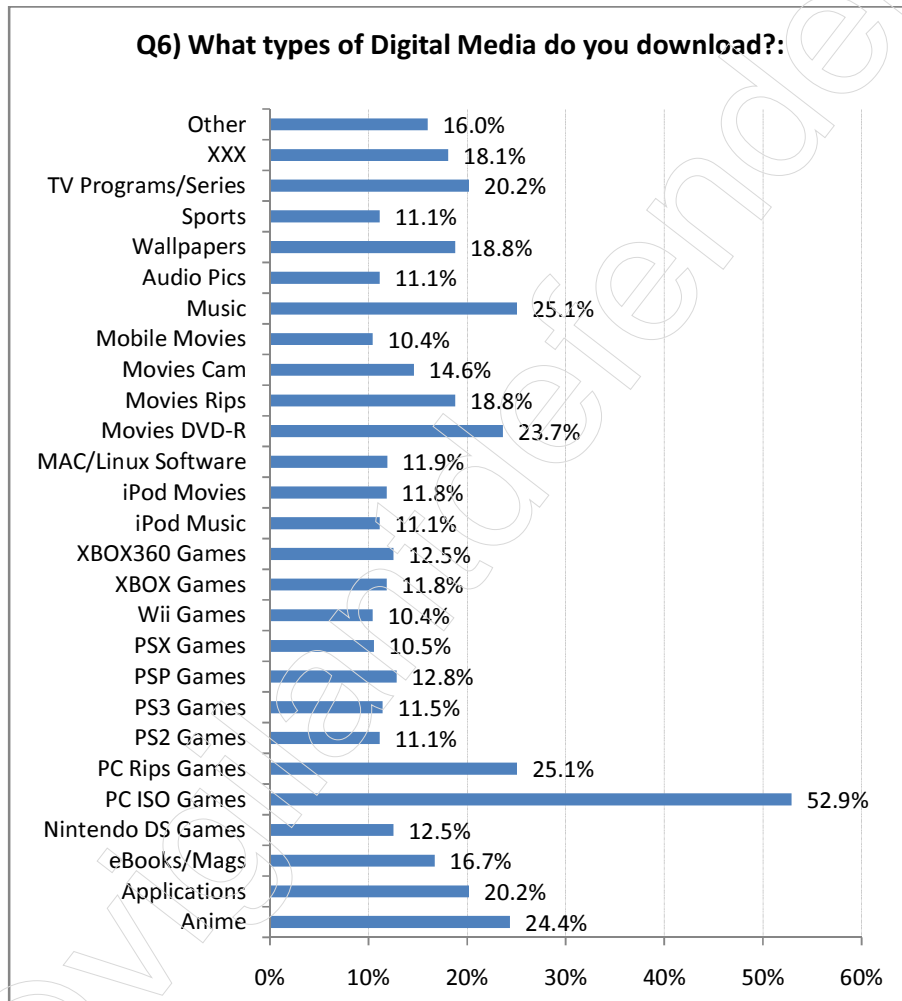


20% of downloaders only download a comparatively small volume of data per month, between 1 and 5 GB which is equivalent to a ripped PC game. ("Ripped" game, means non-essential data has been removed normally the language packs. This reduces the size but varies by considerable amounts, the end file averages between 2 GB to 6 GB.)

As you move further up the download amounts, the numbers decrease, suggesting that only a few are able to download vast amounts. This further suggests that the amount people download is dependent on the money they spend, and the bandwidth they possess.

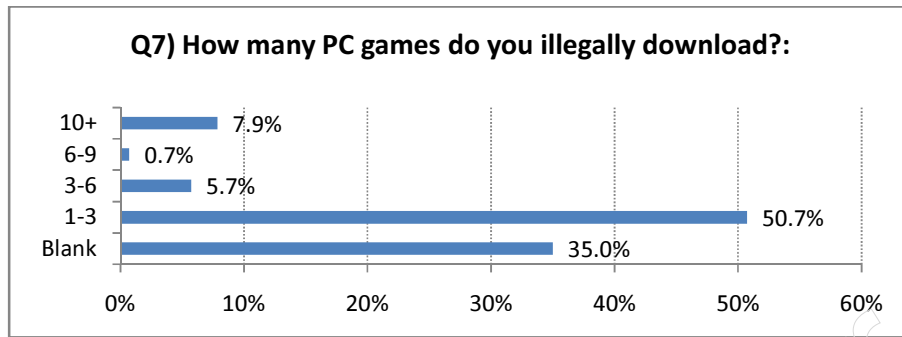
It is hard to know what conclusion to draw from this! We were expecting 1-5 GB to be a low amount, because it is not quite enough for a full game. This suggests that people are not sure of how much they download, or a very low amount of games are downloaded within a year.

Does this mean that people are careful in what they download? Or are illegal downloaders of PC games restricted in other ways such as download capacity?

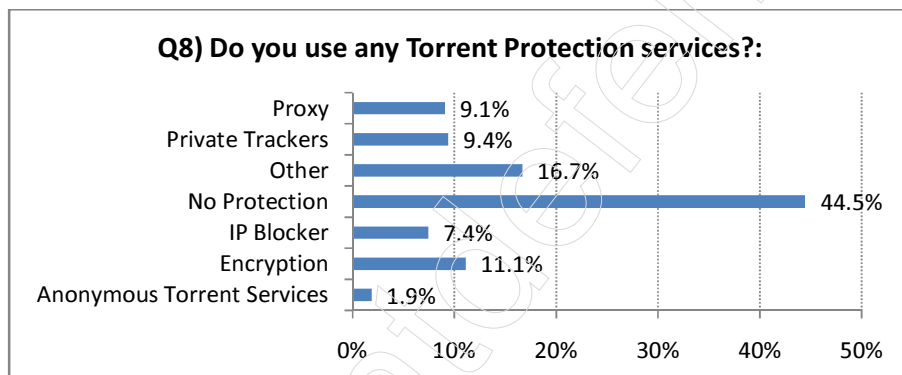


Our Questionnaire was specifically targeted at illegal downloaders who downloaded the PC version of Deus Ex: Human Revolution. This explains the high number of PC ISO Games (52.9%) and PC Ripped Games (25.1%).

What we can draw from this is that illegal downloaders, who download PC games, also download Music (25.1%), Anime (24.4%), Movies (23.7%), TV Shows (20.2%), and Applications (20.2%)



The clear majority of illegal downloaders will download 1 to 3 (50.7%) PC games per month. While this is not surprising as very few PC Games are release every month, when counting throughout a year. What is surprising, when comparing with the data from Question 5, it the suggestion that most illegal downloaders only download a small number of PC games, and nothing else.



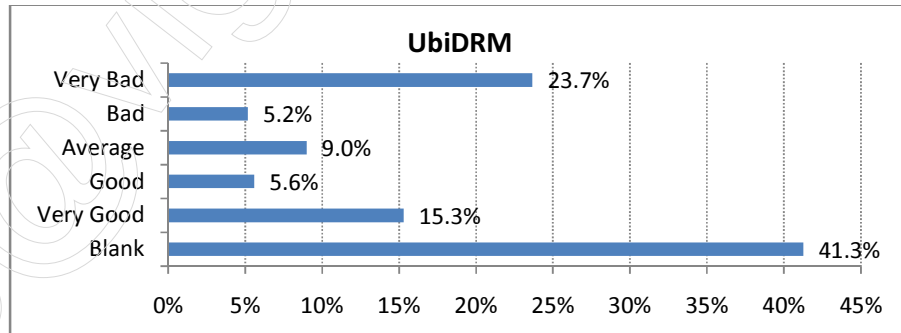
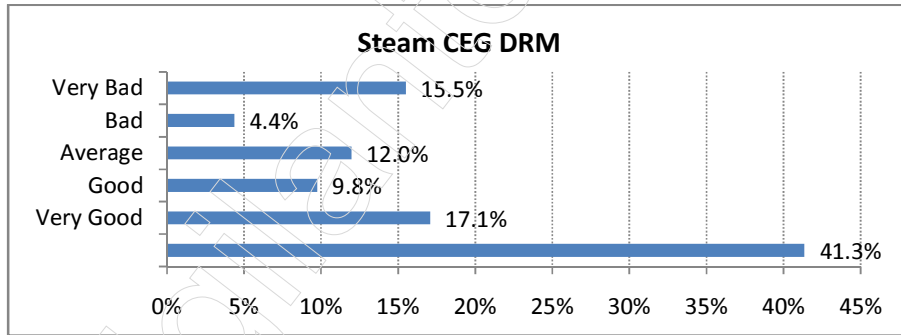
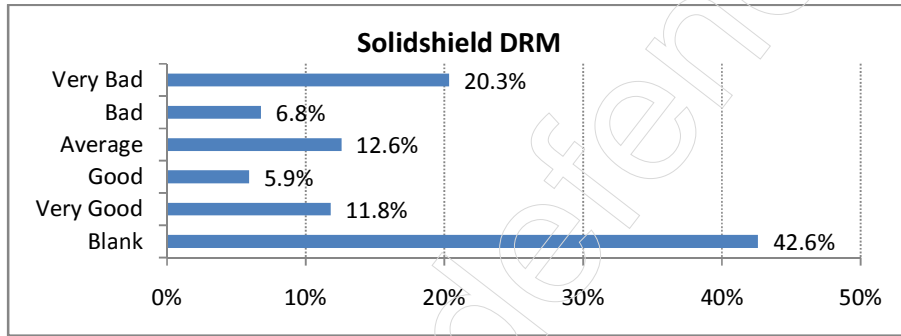
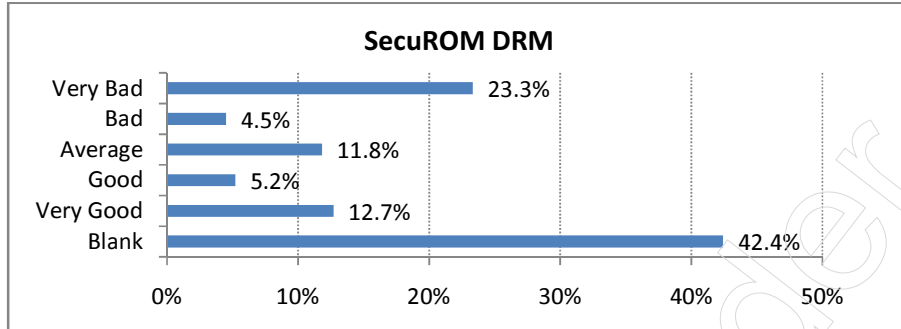
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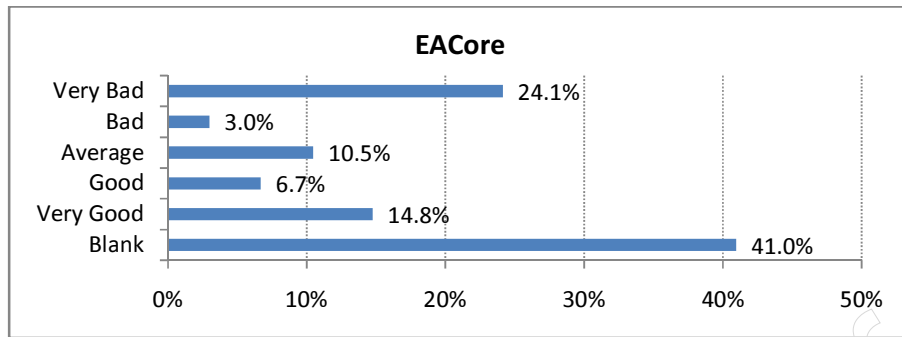
What we can see is the suggestion that most illegal downloaders of PC games do not use any torrent protection service when they are downloading. The reason could be a mixture of ineffective legal cases, gaming software companies do not actively sue, or downloaders just don't feel the need.

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DRMs

Q1) Please Rate the following DRM systems?:





The data in these graphs were far closer than expected, even though in most cases there is a clear majority.

SecuROM: Votes [23.3% Very Bad -- 12.7% Very Good]

Solidshield: Votes [20.3% Very Bad -- 11.8% Very Good]

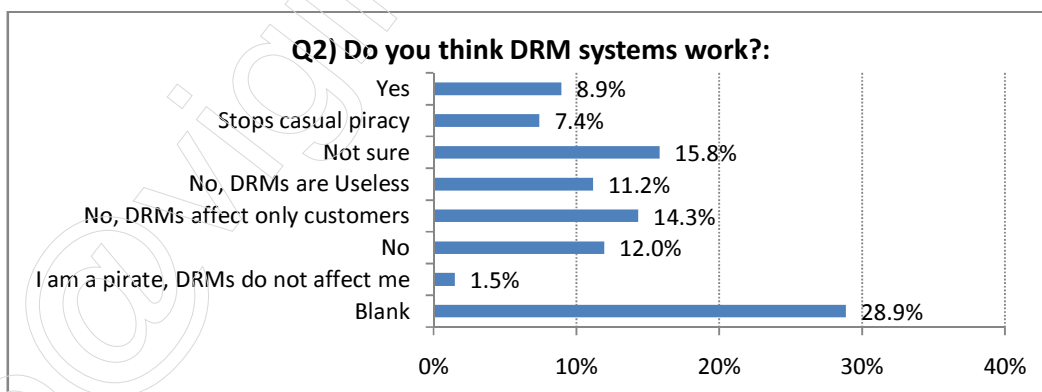
Steam: Votes [17.1% Very Good -- 15.5% Very Bad]

UbiDRM: Votes [23.7% Very Bad -- 15.3% Very Good]

EACore: Votes [24.1% Very Bad -- 14.8% Very Good]

To draw a conclusion on this is difficult, as the gap between Very Good and Very bad in most cases does not give an impression of a sweeping majority. Especially when considering that throughout the Questionnaire, there are many references to DRM being a cause of so much piracy.

Steam CEG is voted as the best DRM, while the vote distribution is even closer, it is clearly different from the other DRM systems.

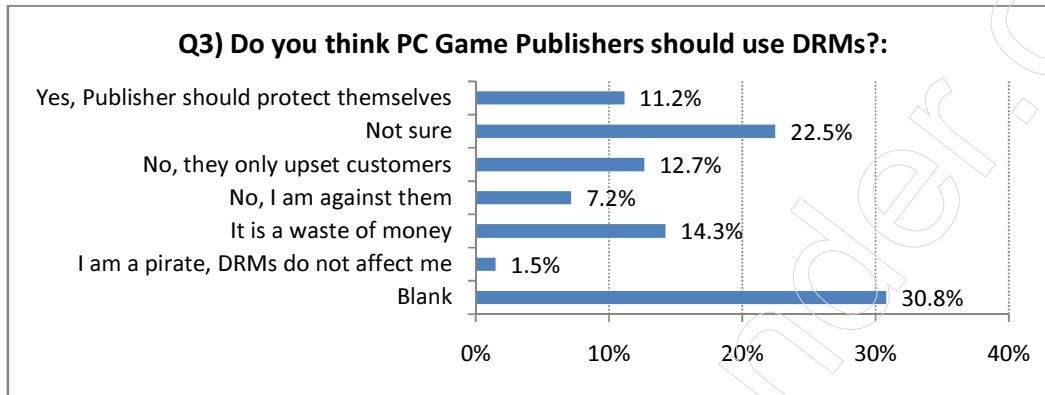


There is no clear leader to this question, but demonstrates that publishers might have more success with some other anti-piracy method than a DRM.

The two positive responses, "Yes" (8.9%) and "Stops casual Piracy" (7.4%), only account for 16.3% of the total vote.

The negative responses, "No" (12%) "DRMs are useless" (11.2%) "DRMs affect only customers" (14.3%) and "I am a pirate, DRMs do not affect me" (1.5%), makes a total of 39%.

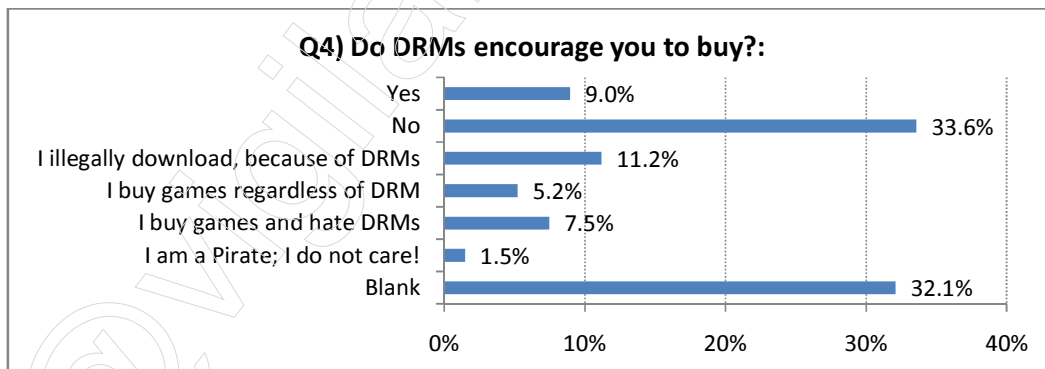
"Not Sure" (15.8%) and Blank Answer (28.9%) makes up the rest at 44.7%.



There are clear indications, from the opinions of illegal downloader's, about Publishers and the use of DRM systems. From the top responses: "a waste of money" (14.3%), "they only upset customers" (12.7%), and that "Publisher should protect themselves" (11.2%).

However what is very clear is the majority, "Not Sure" (22.5%), who show some clear signs of conflict on the whole Publishers using DRMs topic.

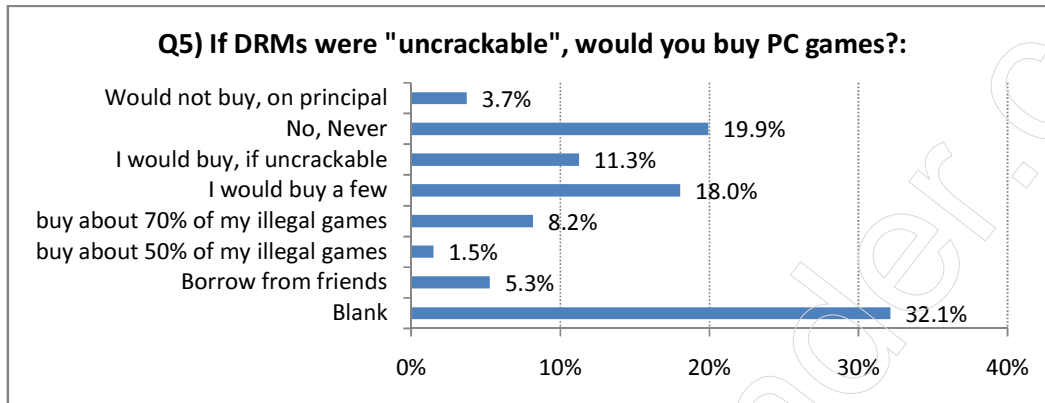
We believe the main sentiment is that publishers could and should protect themselves and their products, but perhaps there is a better way of going about it...



The more important question is whether DRMs actually increase sales for the Publishers. 33.6% are clearly not encouraged to buy games because of the DRM employed. What we really need to ask is: How do we encourage illegal downloader's to purchase? Rather than how can we stop them from accessing digital material?

However, would the answer be different if there was a situation where there was no piracy? Steam ran a similar question to its users, and the response was that DRM affects the products that gamers

buy. However subsequently they commented that they saw no indication in sales to prove that this was the actual case.

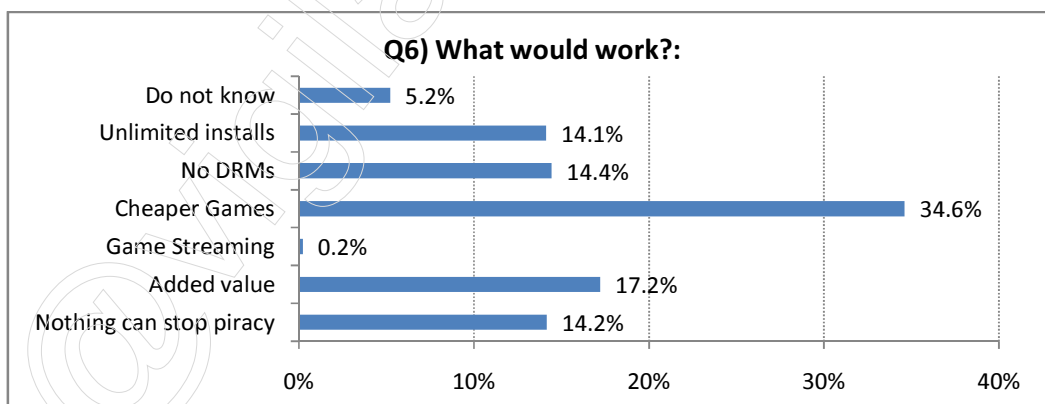


What if piracy was non-existent, if illegal downloaders could imagine it, we asked how this would affect their purchasing patterns. Looking at the grouped responses we see:

28.9% Will not buy PC games! "No, Never" (19.9%), "Would not buy, on principal" (3.7%), and "Borrow from friends" (5.3%).

39% Will buy PC games! "buy about 50% of my illegal games" (1.5%), "buy about 70% of my illegal games" (8.2%), "I would buy a few" (18%), and "I would buy, if uncrackable" (11.3%).

While this might be a reduced number of purchases to the number of downloads per individual in a given year. It does suggest a total 39% of illegal downloaders can be tempted to become customers. We believe they can and that the torrent network is the perfect way of doing this.



The main incentive for potential customers is "Cheaper Games" (34.6%). In economic times such as these, this would encourage more illegal downloaders to purchase. The price, backed by other questions in this questionnaire, is around €22.49 to €26.99 (or \$24.99 to \$29.99) on launch date.

Other incentives that would help are "added value" (17.2%), "No DRMs" (14.4%), and "Unlimited installs" (14.1%). If there was a system that implemented them all, this would be 80.3% of illegal downloader's who would be encouraged to purchase PC games.

Q7) Any comments to add on the above?:

Any comments on any DRMs? What would work? What would not? Will you buy? (Maximum Characters: 500):

Most people choose to leave this portion blank, however the general consensus was:

- DRMs don't work, cause problems, do not deter illegal downloaders.
- Try before buying.
- Games are too expensive.

Some of the Responses:

"1: GPU-hardware-based DRM, complete overhaul of Windows GPU drivers, making them the central hub for any gaming activities, eliminating invasive software DRM and killing piracy... 2: Forcing hardware manufacturers into synchronous product launch intervals + classifying all PC hardware by power/launch date (for instance, "class 1" component launched in 2012 should stay on top for the whole year, turning into class 2 next year and so on), in general, applying some Apple logic to the PC market... "

"ALL DRMs that are being used today can be cracked so they are not limiting pirates in any way. Instead they often cause problems to customers that have bought the game. I have bought "chronicles of riddick: assault on dark athena" game and I had to download crack to play it because of DRM software"

"I don't think there will ever be an "uncrackable" drm. There are a lot of super smart people in the anti-drm area. In my experience buying games with drm, I've had more problems actually paying for games. There are a lot of times, after buying a game, I will download a crack because of problems, just to make the game freaking run."

"I still buy, just trying out the game, and then if I like it I get it, if not, I don't need it to take up space on my pc. "

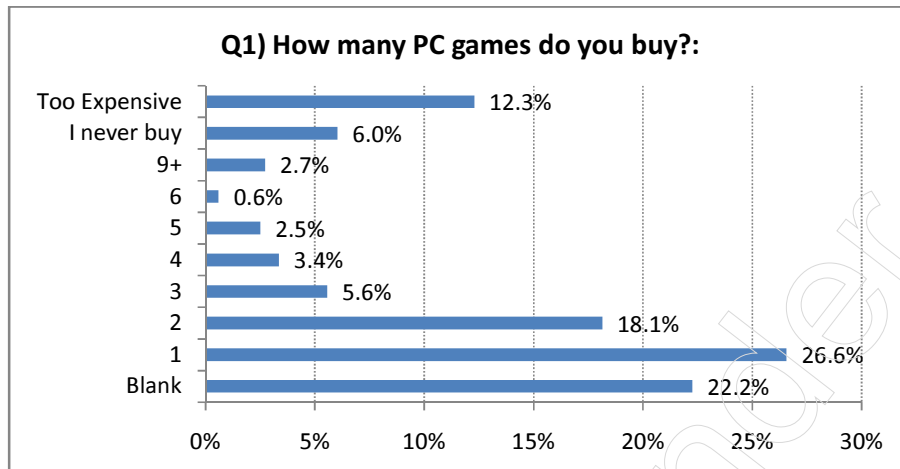
"I usually pirate the game to make sure I like it and then buy all interesting DLCs associated."

"I will not buy a game if I see some article in gamer magazine giving it 10/10, I will buy it cause I love the game and I want to have it. (playing it out is one of the ways, starcraft is for net play)"

"Piracy has been around since man in one form or another. There will always be piracy for better or worse. It is up to the community more than the companies to not stop it, but help keep it in check. Some restraint must be maintained or there would be nothing to pirate."

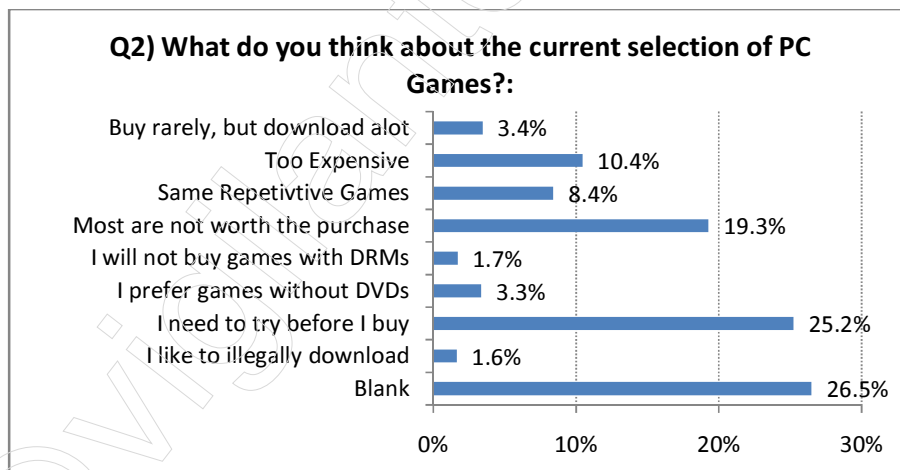
"si je ne peut pas essaye le jeux je ne l'achete pas...(if I can not try the games I do not buy it ...)"

Deus Ex: Human Revolution



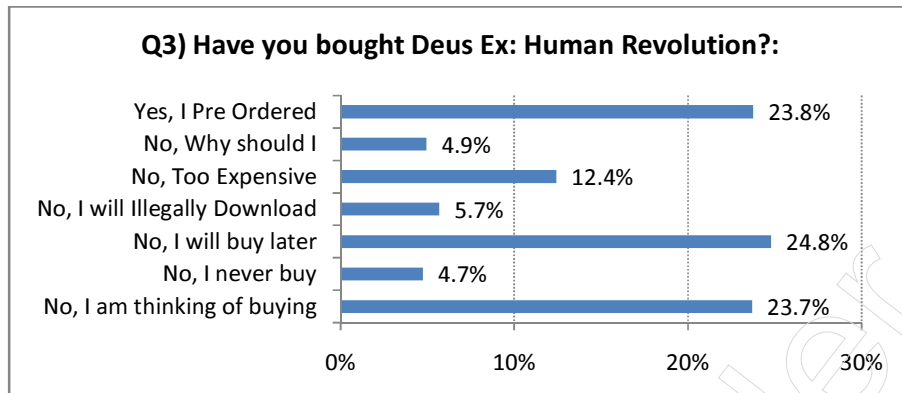
The graph shows the majority of illegal downloaders generally purchase from 1 - 2 games per month, 26.6% and 18.1% respectively.

What was not covered in this questionnaire was if people purchase during the first weeks? Or do they purchase when a PC game is reduced on sale? It would be interesting to find out when illegal downloaders purchase and at what price do they decide a game is worthwhile?



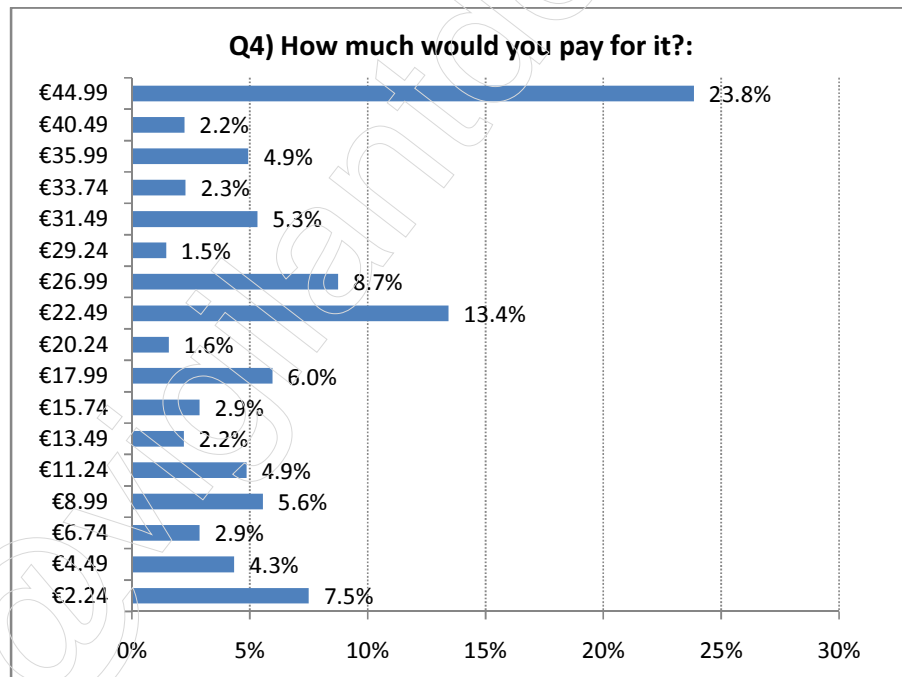
What is interesting here is the answer "Too Expensive" (10.4%) which was one of the top answers for most of the questionnaire, but now it comes in third place.

The top two answers are "I need to try before I buy" (25.2%) and "Most are not worth the purchase" (19.3%). This implies before the expense of the product that people are looking for quality and good value games.



There is and was a huge hype around the release of Deus Ex: Human Revolution. The average critic scores reflect this, as MetaCritic has it at 89% and user score at 8.4. This also accounts for a huge number of pre-orders and illegal downloaders seriously considering purchasing it.

The top answers are "No, I will buy later" (24.8%), "Yes, I Pre-Ordered" (23.8%), and "No, I am thinking of buying" (23.7%). "No, Too expensive" (12.4%) is fourth, showing that when good quality games are released, the question of expense is less important.

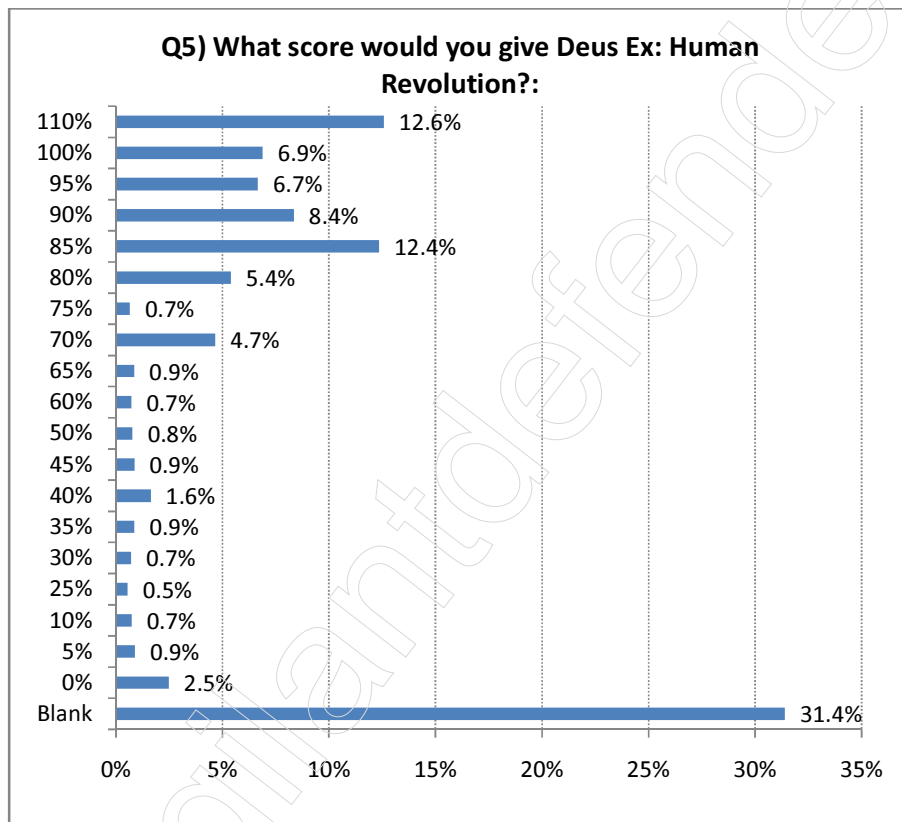


At first glance it may seem strange 23.8% of illegal downloaders would pay the full retail price. But we assume that this refers to the people that have pre-order the game, which also happens to be 23.8% (In Question 3).

We know that many people pre-ordered copies of Deus Ex: Human Revolution on the bases of playing the pre-build leaked version. Suggesting potential customers are glad to buy games, but

might not want to be committed to 3rd party companies. From experience we have also seen downloaders purchase steam protected games, but illegally download them as to have freedom of access.

The graph shows that most illegal downloaders are willing to pay €22.49 or \$24.99 (13.4%) for Deus Ex: Human Revolution. The average is €25.40 (\$28.23) and the median is €22.49 (or \$24.99). The mode in this case is very unique, at €44.99 (23.8%).



There was a large range of answers for this question but the general consensus is a score of over 85%. The official PC Game Critics, score Deus Ex: Human Revolution as 91.26% (GameRankings) and 89/100 (Metacritic).

From the responses of downloaders, discounting the "Blank" answers, we worked out the Average, Median and the mode. The average was 82.09%, the median was 90%, and the mode was again unique at 110%.

Q6) Was there anything you did not like in Deus Ex: Human Revolution?:

The majority of people found this game to be excellent and the general comments where:

- No complaints, the game was great.
- Control System, Xbox Pad.
- Minor Errors.
- Only Played for a short amount of time or Interrupted from Game!
- Loved the first game of the series.
- Gameplay.

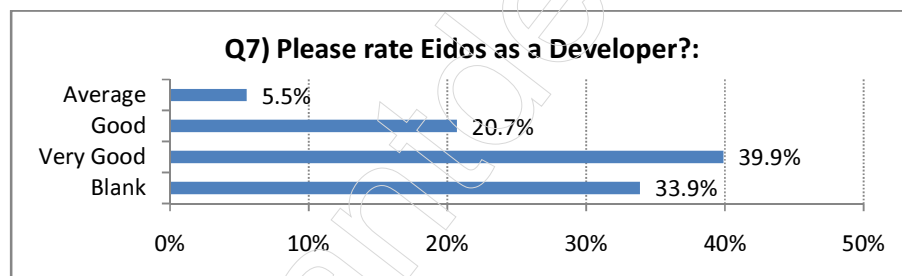
"I was expecting much better graphics. I plan on pirating the PC version and buying the PS3 version."

"I like it so far, I've just played for a couple of minutes, but I'm getting it. Some sort of Co-op multiplayer would be nice, or some DLCs. "

"overall is very good until it closed by it self to answer this question, really annoying if you want to know..."

"visual graphics on guns, older games has better graphics on the guns, the mini map is worthless."

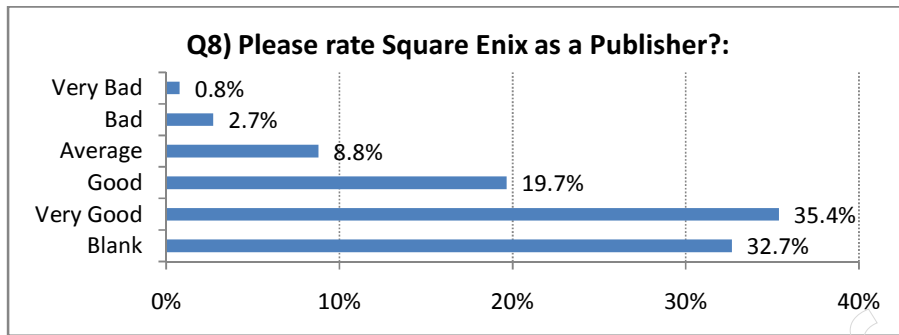
"So far it's generic crap, I'm just killing time really"



The graph shows that illegal downloaders rate Eidos, specifically the Montréal studio, as a "Very Good" (39.9%) developer of games. What is surprising is that no one chose the bottom two answers of "Very Bad" and "Bad". This goes some way in proving that Eidos must be a developer of good quality Games.

Past Games list:

- Tomb Raider series
- Hitman series
- Deus Ex series
- Kane & Lynch
- Thief series
- Championship Manager series
- Legacy of Kain series



Square Enix was also rated highly, with 35.4% choosing "Very Good". Again this shows that Square Enix must be a Publisher of good quality games.

Past Games list:

- Final Fantasy
- Dragon Quest
- Kingdom Hearts
- SaGa
- Tomb Raider
- Hitman
- Deus Ex
- Thief
- Legacy of Kain

The Results

The vast majority of answers stated clearly they would purchase the game, but it was too expensive. Because illegal downloaders were still going to download it illegally either way we offered a reduced price, to truly know if illegal downloaders will pay or not.

The questionnaire calculated a price based on the answers given by the downloader. Then offered a high speed download, backed by a 1Gbps line, if they paid. If they liked what they saw, would they pay to play on? ... and some illegal downloaders did!

We made sure the only demographic was illegal downloaders who were not going to purchase the game through legal means. In the questionnaire, based on their answers, the average price that people stated they would pay was 50% of the MSRP (€22.49 or \$24.99).

However when it came to the numbers, the amount was lower, our return of just over 681,000 Euros. This is an illegal downloader conversion to buy rate of just over 8%. A great result for the first beta test of the Anti-Piracy Strategy. This also shows that the p2p network can be used in a beneficial way for PC gaming.

But we also want to provide a positive user experience; we want to encourage the torrent network as this is a fantastic way of distributing product worldwide at an extremely low cost. A low cost that gamers reap some true benefit from.

Negatives

There were a few drawbacks, which mainly arose from the fact we did not have the source files to modify for ourselves. This caused a few issues, nothing major, but for this experiment and in the time constraints we had to do with what we had.

From this experiment we learnt how to increase exposure to the market and reach more downloaders. There were certain aspects we were unsure of, but the indications and results gained showed better results can be achieved. Perhaps our biggest flaw was that at time we were too cautious.

We have very little negative responses from people answering the questionnaire. A surprising low amount, most people took it seriously, if a little cautiously. Most downloaders wanted to see the end of the questionnaire, but not fill in the answers.

Positives

This system proves many positives:

- Keeps Publishers and Developers in control of the software they have worked on.
- Allows a controlled exposure to millions of potential customers; safe even if they do not purchase.
- Low distribution costs with constant high speed access.

- Easy and convenient to the Gamer, as well as the Publisher and Developer.
- Cheaper prices, passed onto the Gamer.
- High ROT for publishers.
- A distribution system that Gamers prefer!
- Finally ... Illegal downloaders are potential customers.

info@vigilantdefender.com

Conclusion

We don't think that DRMs are the way to go!

Potential Customers should have all benefits!

Illegal downloading is destroying the PC Gaming industry!

Something we truly believe! Whether there is evidence to support it, is neither here nor there anymore. Simply put, it has become true regardless, publishers and developers who are in the business of making money see the PC industry as a lost cause.

Presently pro-piracy arguments do not matter! Publishers are pulling out of the PC Gaming sector because it doesn't make money! Even if all the arguments are correct; from Publishers point of view it makes business sense to publish for Consoles only. Increasingly this is what is happening, which sees a high return and less being published for PC, and this is a sad state.

We love the PC gaming sector, and we want to see the continual prosperity of this sector.

An open digital playground...

benefits for Publishers/Developers...

and benefits for gamers and downloaders.

Illegal Downloading

The reasons for illegally downloading fell into a small variety of responses. The top answer was that downloaders felt PC games are too expensive. This might seem like an odd response given that console games are often more expensive. However there are many benefits to pirating a PC game, over purchasing, beside the most obvious. (Of course we always hope that illegal downloaders will eventually purchase, and don't condone piracy!) The top answers were:

- The ability to try a game before purchasing.
- There are no install limits.
- You do not require physical DVDs.
- Because it's free.

Illegal downloaders of PC games, prefer not to use file hosting services, mainly due to the inconvenience of having to monitor downloads. Torrents have made it so easy, a user searches for what they want, and the torrent client will happily do the rest.

When they do use file hosting services illegal downloader's of PC games prefer MegaUpload (21.3%), RapidShare (19.2%), MediaFire (16.4%), and FileServe (16.3%). On these occasions we imagine it's because they have access to a high speed network, or that they need a small file as soon as possible.

For example, for a game update (updates can be from 50MB – 500MB) they prefer to quickly download, rather than using a torrent system, which could take more time.

Torrents have become so popular that hundreds of sites have sprung up; thousands if you decide to download different types of digital media other than PC Games. The most popular public sites, for PC games, are: BtJunkie (23.7%), The Pirate Bay (19.6%), IsoHunt, and Kickasstorrents (both at 13.4%). The most popular private sites, for PC games, are: IPTorrents (14%), RevolutionTT (11.4%), and BitGamer (11.3%).

And yet a surprisingly low amount of data is downloaded per month. 20% of the survey claimed to download 1 to 5 GB, which suggests a limit by their Internet Service providers. ISP often will put limits on broadband packages, even ones that are "Unlimited". Downloading of 60+ GB per month can be achieved very easily; it depends only on your connection and storage space.

The choices of what you can download is practically endless, as well as our thirst for the data. We might not need it, but some illegal downloaders have become the digital equivalent of a Pack Rat. Illegal downloaders of PC Games will also collect Music (25.1%), Anime (24.4%), Movies (23.7%), TV Shows (20.2%), and Applications (20.2%). The size of these Digital Medias varies, and when adding all to these up it is far too easy to download 5 GB in a week.

- Music (120MB per album)
- Anime (200MB per 30 minute movie)
- Movies (depending on method either 400MB, 700MB, 1.3GB, 4GB per movie)
- TV Shows (120MB per 30 minute show)
- Applications (Depending on category a small application will be under 50MB, while larger can be 700MB or more.)

(Approximately!)

But who is stopping this? We hear lots of news reports of downloaders getting letters demanding money on a suspected case of infringement. And yet the indications show that most illegal downloaders do not use any protection service when it comes to illegal downloading. Unfortunately some of the data for this question was lost, during the survey so we cannot find out for sure.

What is abundantly clear is that nothing will stop people from downloading or sharing through the torrent network. That the amounts being downloaded per month are relatively small, which could be due to ISP connection limitations. That there are benefits a pirated copy offers, beyond the obvious price issue, which a purchase copy does not cater for.

Digital Rights Management

Currently the main protection of PC game is through software known as a DRM, Digital Right Management. Its most basic explanation; it allows those that have purchased the software to use it. The current ones used with PC games are SecuROM, Solidshield, Steam CEG, UbiDRM, and EACore.

In this questionnaire, only one stood out as "Very Good" rating, Steam CEG, and still it was a close result as the "Very Bad" rating got a similar number of votes.

Illegal downloaders had no decisive answer on DRM systems, however the overall tone demonstrated views that they do not work and Publishers should use something else! But what was absolutely clear, was that 33.9% of downloaders stated that DRMs do not encourage them to buy.

Yet there has never been a time when piracy has not existed, and this effects perception. So if it was possible to imagine uncrackable DRMs, would PC games be bought? The crowd was divided by the answer, 28.9% said they "would not buy" while 39% said that "they would", though purchase quantity did vary.

Further probing the illegal downloading psyche, we wanted to see what would encourage them to purchase games? Again the main limitation was the expense, with 34.6% of the survey stating this factor would reduce piracy. The other factors were "added value", "No DRMs", and "Unlimited installs".

DRM systems are clearly not the solution, as potential customers do not respect it. Lowering prices, meeting other needs, and providing other benefits show a high probability of combating digital piracy. It is just impossible for DRM systems to work as they have no protection from sharing the modified exe file, i.e. sharing the "cracked" game.

Deus Ex: Human Revolution

This section asked questions over the whole PC Gaming industry and the newly released Deus Ex: Human Revolution (23rd Aug 2011).

The questionnaire started with illegal downloaders purchasing habits and found that 26.6% purchase one, and 18.1% purchase two games a month. It is interesting that 12.3% believe that PC Games were too expensive, and 6% never bought. This really shows that price is the biggest affecter, which leaves the PC Gaming industry behind the other sectors.

Next we wanted to know the perception of the current gaming titles out on the market today. The highest response 25.2% was "I need to try before I buy". This could be used to the advantage of PC games when increasing sales.

The general picture we get is not one of an illegal downloader, but a potential customer looking for good value and benefits. When asked if illegal downloaders had purchased Deus Ex: Human Revolution, all the top answers related to having purchased or seriously considering. This implies, because the game scored very highly, it is of high quality and willing to purchase the game.

It is still a mystery if potential customers would be willing to purchase? On the one had 23.8% pre-order the game and paid full price, €44.99 or \$49.99. On the other hand the next highest point on the graph, 13.4%, indicated that most downloaders would purchase at €22.49 or \$24.99. This is a total of 62.1% of illegal downloaders who would pay for this game at €22.49 or higher.

Of course this figure is dependent on the game, we believe that the higher the average score, the better. Unfortunately games with lower scores will have to lower their prices. Still there was no such problem with Deus Ex: Human Revolution which scored 91.26% (GameRankings) and 89/100 (Metacritic). In our survey the illegal downloading population score it at an average of 82.09%, a

median of 90%, and the mode was unique at 110%. Though technically we believe the mode should have been at 85%.

The general reviews with Deus Ex: Human Revolution were great and there were very few complaints. Potential customers are willing to purchase good quality games, but in this hard economic climate and with so many different options on offer, it's all about getting value for money. They also recognise that both Eidos and Square Enix are themselves producers of great games, and rated them both as "Very Good" companies.

Overall

When a customer enters a retail store looking to purchase a game, PC games look very unattractive. Apart from the complex nature of system requirements, and even if everyone is met; it doesn't always guarantee it will work.

What makes a PC Game such a bad value proposition, even though it is cheaper than the console version, is the trade-in factor! You have never been able to trade-in PC Games, due to restrictive DRMs, and from a customer's point of view a Console game offers better value.

Often PC games are equated to the best graphics, therefore the user should be willing to buy, but the point is moot. This depends solely on the user's machine and how much power it has. Instead we have to make PC games, with benefits, because in these times "Good Value" matters most.

DRMs have an unfair reputation; first and foremost, many illegal downloaders take for granted that DRM are simple to remove. In fact very little credit is given to the cracking groups; all DRMs are very capable at stopping people from accessing digital media!

... And yet each one constantly fails to stop millions of downloaders. Why?

There are only a small handful of people that remove a DRM, via assembly code, from an exe file. This takes a high level of programming skill to do this. Unfortunately what DRMs have no protection against, is the sharing of its modified self. One person is able to propagate to millions around the world in a matter of seconds. This is why illegal downloading is so prevalent, not because DRM software is ineffective.

And yet... we too are of the opinion that DRMs should not be used. For two reasons, it tackles the piracy problem in the wrong area and it does nothing for the customer. We want an encouragement of the purchasing of PC games, not a restriction on sharing.

Another factor in the propagation of illegal downloading are regional prices! Two weeks before the launch we did a price check of Deus Ex: Human Revolution worldwide. Economic factors seemed to play no part in prices and at the time Spain, Italy, Greece, and Ireland were hit very hard by a recession.

Now you have to ask, why does Italy and Spain have the highest piracy rates in the whole world? Especially when you consider that both the United Kingdom and Ireland (Eire) sold the game for €30

while the rest of Europe priced it at €50. It seems very unfair, and yet gives us an understandable reason why piracy is the way it is!

Prices for Deus Ex: Human Revolution (All prices were taken from GameStop stores in each country.)

Europe	€49.95
UK	£24.95 (about €29)
Ireland	€29.95
Canada	CAD\$49.99
America	\$49.99 (about €38)
Australia	AU\$65 (about €47)
New Zealand	NZ\$79 (about €46)
Steam (European Areas)	€44.99

What needs to be accomplished?

- PC games should be sold at a much lower price on launch date, people should continue to download, and that both sides could reap benefits.
- Publishers don't need DRM software, as they don't work by themselves, and need to be redesigned.
- Illegal downloading has to stop, the excuses do not matter, it's not the right way to go about things!
- The illegal distribution network should become an open digital playground where trial version would be freely available to all.
- A non-commitment that ties people to a third party servers.