



Virtual Items, Virtual Currency and Public Policy

A White Paper by the Virtual Policy Network

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0 Summary

From Facebook gifts to Microsoft Xbox points, virtual items are an expanding phenomenon that are now a day-to-day part of many citizens' online lives. Virtual items have value for both consumers and publishers. Currently the market for virtual items is estimated to be worth around US\$5bn annually and is growing.

Traditionally, virtual items have been associated with niche online games such as *EverQuest*. Where virtual items have been subject to regulation, this has been part of online game content regulation.

The expansion of the virtual item market (publisher to consumer) and the growth of secondary markets (3rd party or consumer to consumer) have started to raise a number of potential public policy issues. These include:

- Rise in virtual item related crime, e.g. theft
- Use of virtual currencies as an alternative to hard currencies

A complicating factor with virtual items is that their legal status is often vague, contended (between publisher, user, and state), and varies from jurisdiction to jurisdiction. The policy responses to implications of virtual items is varied and includes all of the following:

- Treat as mere content and ignore other issues
- Apply existing laws
 - Either to related acts such as hacking rather than virtual items themselves, or
 - Directly to virtual items characterising them as goods
- Create new laws
 - E.g. restricting the use of virtual currency

This report looks in detail at the nature of virtual items and the related policy implications. It also provides a brief survey of key virtual item court cases from around the world and a survey of policy responses and statutes.

More detail and updated cases and statutes can be found at the Virtual Policy Network web site: www.virtualpolicy.net/tag/VirtualItems, email info@virtualpolicy.net for more information.

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1 Background

Virtual items are items, currency, and characters that are features of virtual spaces such as social games like Farmville, role-play games like World of Warcraft, and online social spaces such as Habbo Hotel. As a practical matter virtual items have economic and social value; as such they have the potential to raise a range of public policy issues. These include:

- Harms caused to users (whether these are actual or only perceived we shall explore);
- Industry liability; and
- Economic and taxation issues.

This paper will explore the possible harms associated with virtual items and the possible policy responses. The paper will cover consumers, industry, and society in general. The paper will not cover other perceived issues associated with the industry such as addiction, violence, etc.

For the avoidance of doubt, this paper starts with the assumption that, on the whole, virtual spaces that utilize virtual items are an enjoyable pastime for millions, a source of innovation, and make a positive contribution to the economy and society. Any perceived harms caused directly or indirectly by these spaces must be examined carefully and policy responses balanced against the net benefits.

1.1 How Virtual Items Work

For the purposes of this report virtual items are digital objects (technical records in a database and their attributes) that exist in virtual spaces that are purchased for hard currency. In a broader sense things such as MP3 files or word documents are also virtual items and many of the policy topics covered in this document may apply to them; however, they are outside the scope of this present report.

Virtual items originated in virtual world games that date back to the late 1970s. However it was not till the late 1990s that a significant market emerged – this was largely due to the popularity of the games *Ultima Online* and *EverQuest*. In these games accounts are represented by a character - which in turn has attributes, in-world currency, and associated objects. These attributes, currency, and objects are typically ‘earned’ by playing the game. As such they have a notional value that relates to the effort required to obtain the attribute or object. What’s more, many objects can be exchanged between accounts – this establishes both value and a market mechanic. In many of these games it is against the Terms of Service to use hard currency in exchange for virtual items (so-called RMT or Real Money Trading). However a number of games, such as *Ultima Online*, do allow the trade of hard currency for virtual items, and the publishers of the game generated new sources of revenue by selling object to players.

More recently, this latter model of selling items directly to users has grown as a business model. Known as the micro-payment model, it is now common for platforms such as Facebook to sell virtual items which can be exchanged between users. This is a sophisticated market, with some spaces creating artificial scarcity in items to maintain market prices. Seasonal items such as virtual Christmas gifts are also popular in this market.

Lastly, the concept of virtual currency is gaining broad popularity and expanding out of the traditional market of virtual worlds. Platforms such as Microsoft's Xbox Live use a points system for the purchase of digital items rather than a direct purchase model. Here users buy 'points' which are then redeemed for things like games, or song expansions for games such as Rock Band (with this particular game, there is a direct cross over with the music industry as a Rock Band song download includes the song i.e. just like an MP3 download, as well as the additional game elements).

In summary, we can say that virtual items fall into the following broad typology:

- Items 'earned' through play;
- Items purchased;
- Currency; and
- Accounts.

1.2 Value in Virtual Items

Due to the core mechanics of virtual worlds outlined above, users tend to perceive a value in the virtual items. They also tend to perceive that these items are their property and they own the associated value. That is, in a traditional game users feel that they have 'earned' the items through their labour playing the game; that the reward for play is very much theirs. Similarly in micro-payment and other models, users feel they have purchased the virtual item and hence own it.

On the whole virtual world and computer game publishers maintain that either the virtual items retain no value, or, what value that they do obtain, is owned by the publishers.

These mechanics and perceptions of value give rise to various types of market in virtual – generally based on the trade between the cash 'rich' and the time 'rich', we can categorise them as follows:

- Publisher-User market – where publishers sell items / accounts / services to players for hard currency.
- User-User internal market – where players exchange currency between each other for in-game / in-world items. Typically these are closed markets where virtual currency is exchanged for virtual items, like a game such as Monopoly Market. There are also markets where hard currency or tokens representing it are exchanged for virtual items, but these are the exception rather than the rule.

- User-User external market – where players exchange hard currency for in-game items. These tend to be ‘grey’ markets, i.e. markets not sanctioned by the publishers.

However, virtual world publishers tend to have a different legal view of the situation. This dissonance gives rise to a number of issues which we will explore below.

1.3 Size of the Virtual Item Market

There are no exact figures for the size of the virtual items market. One of the reasons for this is that the items sold outside the Terms and Conditions of a given game represent a grey market, which is hard to estimate.

Virtual World analysts KZERO estimate¹ the size of the market to be US\$5bn (June 2010), rising to US\$14bn by 2012. This estimate puts the average revenue per customer at about US\$5. Other sources put the 2009 virtual items revenues for the Asian market alone at US\$3.8bn.

Traditionally games have dominated the virtual items market, however a recent analysis of Facebook² revenues suggests that in 2009 US\$75m representing just over 10% of annual revenue came from virtual items.

Whilst many ‘micro-transactions’ may be under US\$1, adding up to around US\$5 per user, there are exceptions where single items can cost significant amounts. Blizzard recently created a World of Warcraft item priced at US\$25. A World of Warcraft account has reportedly changed hands for €7,000; some games, particularly in the Russian market, rely on single item sales in the thousands of US\$ range.

1.4 Consequences of value

Much of this white paper will examine the practical and policy consequences of virtual items. Many of these consequences are simply products of the perceived value of virtual items, i.e. anything of perceived value tends to attract various behaviours from altruistic to criminal.

1.4.1 Value by Design

It should be noted that the nature of virtual items outlined here is a consequence of the design decisions made by publishers. That is, virtual items could have little to no perceived value apart from the combination of two key factors:

- Artificial scarcity

¹ <http://www.kzero.co.uk/blog/?p=3624#more-3624>

² <http://www.insidefacebook.com/2010/03/02/facebook-made-up-to-700-million-in-2009-on-track-towards-1-1-billion-in-2010/>

- Ability to trade in-game

However, while publishers could design a game differently, these mechanics prove to be highly popular. Hence there are strong economic motivations to create this type of design. What's more, while this paper focuses on the negative issues, in the main, virtual items provide a positive experience for users and publishers alike.

1.4.2 Gold farming: An Industry of Play

Gold farming is the term given to the professional use of online game to generate income. Typically gold farmers will focus on elements of a game that deliver high reward and then sell those rewards to other places. While the term suggests that this is just online currency, gold farming includes many types of virtual items and also services such as 'character levelling', where someone pays another person to play the game for them.

Gold farming is controversial both among publishers and players. Players who use gold farmers tend to be looked down upon by the player base. However, gold farming tends to occur either in South East Asia or Eastern Europe and some argue that the practice may be positive for the workers given the relative level of wages, the working conditions, and the transfer of wealth from relatively affluent societies to poorer ones. That is, gold farming can be seen as a form of globalization.

1.4.3 Charity

The ability for people to generate value through virtual items has inspired a number of charitable works. One example of this is the Relay for Second Life – this is a leg of the American Cancer Society's Relay for Life that occurs in the virtual world Second Life. In total Relay for Second Life alone has raised US\$220,000 and involved participants from over 30 countries.

2 Policy issues

2.1 Ownership and Value of Virtual Items

2.1.1 Perception gap

A common theme with digital items is a gap in perception between individuals and companies with respect to the value and ownership of items. The policy stance to this single issue has broad implications for most of the policies that apply to virtual items.

In the case of the music industry users tend to perceive little or no value in the digital good, e.g. an MP3 of a song. What's more, users perceive that they have full ownership of these items. This in turn gives rise to the practice of so-called 'piracy' and the widespread perception that there is nothing wrong with it. Music publishers (and many artists), on the other hand, perceive the value of the virtual item such as an MP3 of an album to be roughly equivalent to that of the equivalent physical good, e.g. a CD priced at circa €10.

In the case of items in virtual spaces the value perception tends to be the opposite of that in the music industry. With virtual spaces users tend to perceive that there is value in virtual items and as with music files they tend to perceive that they have full rights to those items, i.e. to share / sell them; publishers tend to maintain either that there is no value in the items, or that there is value but that the publisher owns it - not the consumer.

While the respective position of publisher and consumer in regard of virtual items in the virtual world industry is the opposite of that in the music industry, what is common across the two industries is that publishers maintain their position by resting on the assertion of strong intellectual property rights and contractual obligations.

2.1.2 Publishers' Stances on Value

For any given virtual item and user there appear to be four possible relationships between the user, their rights, and the virtual item. These are as follows:

- Item has no value and
 - Users do not have rights
 - Users have rights to them
- Item has value and
 - Users have no rights
 - Users have rights

In practice however things are a little more complex. Terms and Conditions of online services create a basket of user rights that are generally limited, often excluding things like 'value', and tend to include clauses that reserve the right for the provider to withdraw any or all rights from users at any time.

2.1.3 No Value

The most common industry stance in respect of virtual items within online spaces is that they are valueless. In this case the notion of user rights, in particular to the value of the item, are moot, i.e. if a provider asserts that something has no value then by definition a user has no right to the value.

In this scenario a user gains a virtual item either through direct payment or through acts in an online space (or some combination therein). The online provider asserts that these items have no retained or representative value. Users' rights tend to be limited to restricted uses of the items under the sole discretion of the provider. Users tend to be explicitly prohibited from redeeming any value from the virtual items either from other users, e.g. through sales, or from the service provider, e.g. by claiming money back. What's more, providers always reserve the right to terminate a user account - which in turn cuts off access to all virtual items.

Case Study: Microsoft Points

Microsoft Points is a system where by users purchase points that can then be redeemed for virtual items such as games, virtual artefacts, etc. At the time of writing a Microsoft Point costs £0.0085 and could be purchased in lots of 500 to 6000 priced at £4.25 to £51.00 respectively. An ordinary user may suspect that this is an account balance with Microsoft, which it effectively is. However from a contractual point of view Microsoft are very clear to state that this is not the case. In fact, after purchasing Microsoft points a user has almost no rights to them, save at the discretion of Microsoft, and they have no monetary value. To quote the terms of service³ (emphasis not in original):

Microsoft Points is a service by which you can acquire Points and redeem those Points for certain online services and digital products.

[...]When you obtain Points, you have obtained a limited license to a digital product.

Points have no monetary value. *You may not obtain any cash or money in exchange for Points, regardless of how you acquired those Points. Points are not your personal property*

*[...]We may cancel, suspend, or otherwise limit your access to your Points balance if we suspect fraudulent, abusive, or unlawful activity with regard to your Points balance. **Once we delete Points from a balance, we will not reinstate them, except at our discretion.***

When we cancel, suspend, or otherwise limit access to your Points balance, your right to use your Points balance immediately ceases.

Here, a case might be made from a consumer rights point of view that the typical service established under these conditions is unfair. Quite apart from the asymmetrical nature of the contract ('unfair conditions' in EU parlance, 'Unconscionable' in US), the type of agreement that a user enters into means in effect that the user gives a provider hard currency for virtual items but gains no contractual right to any value in return. Users get a limited licence to use the virtual items, but in addition to excluding any rights to value, these licences can typically be rescinded for any reason or no reason and are subject to alteration at the sole discretion of the provider.

³ Xbox.com | Online Policies - Xbox LIVE Terms of Use: <http://www.xbox.com/en-US/legal/LiveTOU.htm> (accessed on 23 Sept 2010)

In a worst-case scenario a fraudulent operator could run a service on this basis and abscond with the customers' credits. However as is explored below (see Section 2.1.4 Value & Rights option), a policy intervention that forces providers to recognize rights in virtual items may have the consequence of materially altering the legal status of the online provider – which may in turn have negative market and consumer outcomes.

Case: Hongchen vs Beijing Arctic Ice Technology Co Ltd

In February 2003 virtual items in the game *Hungyue* aka *Red Moon* were stolen from Li Hongchen. Li asked the publisher *Arctic Ice* to identify the player. The publisher claimed they could not release the player's identity; the police also would provide no help. Li then sued *Arctic Ice* for 10,000 yuan in compensation for the virtual items. On 18 December 2003 Beijing's Chaoyang District People's Court ruled that *Arctic Ice* had to restore the items as they were liable for the loss due to weaknesses in the game that allowed it to be hacked. While this case did not establish value in the items *per se* it did, at the very least, establish a duty of care on behalf of the publisher in respect of items held by a player.

2.1.4 Value, User Rights

If an online provider recognizes retained value in virtual items and users' rights in that value, in particular the right to redeem the item for hard currency, then in the view of many jurisdictions the provider is in effect a bank - or at the very least some form of e-currency provider. Typically this means the online provider would fall under some form of financial service regulation. For this reason the 'Value & Rights' status has been avoided by almost all online service providers that utilise virtual items.

Case Study: Project Entropia

Project Entropia published by *MindArk PE AB* of Sweden is the only well-known example (and possibly the only example) of a virtual world that has recognized the value and redeemability of virtual items. The in-world currency of *Project Entropia* known as Project Entropia Dollars (PEDs) have a fixed exchange rate of 10 PED to US\$1. PED's can be purchased with hard currency and redeemed for hard currency.

Accordingly *MindArc* has a subsidiary *Mind Bank AB* through which these financial transactions operate and this has a banking license issued by Sweden's Financial Supervision Authority (Finansinspektionen).

Some service providers maintain a halfway position. In these cases providers grant that users have rights to virtual items that include the right to 'sell' those items. What is going on under the legal covers is that the various terms and conditions state that the users are merely selling limited licenses to use the virtual items – the licenses, of course, can be withdrawn at any time, have no intrinsic value, and confer no ownership of the underlying property rights. In this way providers can allow what looks like a trade in items without becoming a financial service provider.

Case Study: Sony Station Exchange

In July 2005 Sony launched 'Sony Station Exchange' which enabled players on their *EverQuest II* game on 'Station Exchange' servers to buy and sell virtual items and accounts. This service made official a practice that had been occurring on grey-market sites for some time.

The service still exists though has been re-branded in 2008 as part of a deal with Live Gamer Exchange, an independent online virtual item market place. Station Exchange was promoted on the basis that it was a secure way for player to trade, however Sony Online president John Smedley stated⁴ that Sony's version had \$3m in revenue but that fraud was 'fraud rate begin to climb pretty high, because these farmers are becoming professionals.' What's more Smedley stated that the fraud had started to include credit card fraud originating in China.

2.1.5 Value, No User Rights

Virtual items having recognised retained value but users having no effective rights to that value is uncommon in respect of virtual items within online services. However in the case of downloaded items such as game software it is the standard position, generally in the software, music and movie industries.

Case Study: Kindle '1984'

On 17 July 2009 Amazon removed copies of *1984* and *Animal Farm* by George Orwell from the Kindle reading devices of its customers. The reason for the deletion was that the US Copyright holder of the works claimed the sales had been in breach of their rights. What's more, the Kindle Terms of Service gave Amazon the right to remove content without the users' explicit permission. A few days after this incident company CEO Jeff Bezos stated⁵ that Amazon had been 'stupid, thoughtless, and painfully out of line with our principles' in deleting the content and stated that Amazon would not use these means again.

However, the right and ability to delete content from people's devices remains on many platforms. Google, for example, has deleted applications off the Nexus One phone.

In these cases a user typically downloads the virtual item to a hardware device – a computer, a games console, in the case of music an MP3 player, or with books a reader such as a Kindle. The provider tends to grant the user rights to use that virtual item. These rights are often limited, either contractually or technically or both, to use on a particular type of device. What's more, the provider often retains rights over the item, such as the right to delete it.

Unlike in the cases above, in these situations the provider asserts that the virtual item retains all its value, but none of that value is transferred to the user when they 'purchase' it. Thus, users typically have no right to sell the item.

2.1.6 Hybrid Models & Legal Complexity

The categories above have been defined in deliberately simple and exclusive terms. In reality providers tend to legally mix some of these categories. What's more, in some jurisdictions the law is not clear or consistent when applied to virtual items.

What is common is that virtual items tend to be defined in the Terms of Service or End User Licence Agreement. They are defined as being part of the game

⁴ Q&A: SOE, Live Gamer Reveal 'Live Gamer Exchange' Service http://www.gamasutra.com/php-bin/news_index.php?story=17268 (accessed 25 September 2010)

⁵ http://www.amazon.com/tag/kindle/forum/ref=cm_cd_ef_tft_tp?encoding=UTF8&cdForum=Fx1D7SY3BVSESG&cdThread=Tx1FXQPSF67X1IU&displayType=tagsDetail

software to which the user has a limited licence to use. In some instances the licence for the digital item is differentiated in some way.

In Second Life, for example, virtual items are defined as separate from other elements of the software and rights are retained by the user, although there are provisions to licence the items to Linden (the publisher of Second Life) both so that they can be used in Second Life and seen by other places, and used by Linden for market purposes if they so wish. Also, while Linden recognizes the rights of individuals to the in-world currency Linden Dollars, legally Linden maintains the standard legal position that their 'currency' is merely a limited licence in software and has no value in and of itself. What's more, while maintaining a broadly common carrier approach to content, Linden actively prevents users from engaging in gambling and so-called banking.

These legal complexities tend to be within long legalist terms of service – thus practically unavailable to the average user. What's more, a number of legal ambiguities make the actual status of virtual items unclear in many jurisdictions (see cases and case studies in the rest of this paper). For example, the overall terms of many contracts might be open to a challenge under EU law. Additionally, the legal status of software as a Good or a Service is often unclear. Lastly, online games often fall between regulations, as game regulation tends to be for fixed media and communications and commercial regulations tend not to recognize virtual items in virtue of their contractual status.

Case: *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D.Penn. 2007)

In 2007 Mark Bragg brought a case against Linden Lab and Linden CEO Philip Rosendale personally. Bragg, a user of Second Life 'bought' virtual land. Linden alleged that he has used unfair means to purchase the land at the price that he did blocked Bragg's access to the land. Bragg then sued on the basis that Linden's and Rosendale's public statements made it clear the purchase made him the rightful owner of the land. In its defence Linden rested on the Second Life Terms of Service – effectible saying that all their public statements about the virtual spaces being 'your world' were mere marketing and in fact no one but Linden 'owned' Second Life.

After an initial judgment that ruled specially against Linden's arbitration clauses and seemed to cast doubt on other aspects of their defence the matter was settled out of court and the details were not disclosed by either party.

2.2 Loss of Virtual Items

If we define the loss of a virtual item as its removal from a user in a way that the user does not wish for, then there are many ways that virtual items can be 'lost'.

Causes of loss can be broken down into a number of categories. Loss caused by third parties includes acts such as:

- Force;
- Cohesion;
- Duping; or
- Hacking.

Loss through acts of providers includes:

- Error;
- Account closure due to breach of contract;
- Fraudulent operator;
- Mercurial act by provider; or
- Provider going out of business.

In addition, third-party acts that are sometimes associated with item loss are:

- Loss of hard currency, e.g. through credit card fraud or PayPal charge backs; and
- Identity Leaking / Theft.

2.2.1 Issues & Interventions

The status of the acts listed above depends, in part, on the legal status of the virtual items in question. Broadly speaking, if a provider defined a virtual object as being their property to which a user only has a limited right of use, if the item is 'lost' then, from a provider's point of view, nothing of consequence has occurred to the user, as the item was never theirs in the first place. What's more, if the loss occurred while a user was attempting to buy or sell such items then the provider may ban the user for breach of contract. This type of incident notwithstanding, we might characterise the acts above as falling into a number of categories.

In the following acts, the virtual item may be the target of the act, or at least involved in the process, e.g. people providing their credit card details as part of a virtual item sale, subsequently to have their credit cards over charged. However there is some element of the act that is clearly illegal in many jurisdictions:

- Force
- Hacking
- Loss of hard currency e.g. through credit card fraud, PayPal charge backs
- Identity Leaking / Theft

In the types of act listed below it is less clear what the situation is. If we assume that the items in question are those that a provider asserts that have no value and / or limited user rights then they may argue that no loss of any consequence has occurred to the user. However in each case it may equally be argued that irrespective of the provider's position an action of consequence has occurred.

- Cohesion
- Duping
- Fraudulent operator

This last set of acts is similar to the previous set, but here one has to maintain a stance contrary to that of the provider to argue that an act of consequence has occurred to the user.

- Error
- Account closure due to breach of contract
- Mercurial act by provider
- Provider going out of business

Case: Virtual Items Robbery

In⁶ 2007 in The Netherlands a 13 year-old player of the online game *RuneScape* (*Jagex Games Studio, UK*) was kicked and threatened with a knife by two 14 year-olds until he transferred virtual items to one of their accounts. In 2008 a Dutch court found the both defendants guilty of robbery under Article 312 of the Dutch Criminal Code, noting that the virtual items qualified as goods under Dutch law. In the past Dutch courts have ruled that electricity is a good but that software is not – thus this case is seen to set precedent in The Netherlands's jurisdiction. This case was upheld by the Dutch Supreme Court in February 2012 and may stand as a test case for the Western concept of virtual goods – see Appendix for details of the case and the judgment.

2.3 Quality of Virtual Items

The concept of 'quality' is core to much consumer law. However in the case of virtual goods the notion is problematic, this is for a number of reasons including the following:

- Virtual goods are often dependent upon a particular platform e.g. Facebook Credits require Facebook. If the platform goes out of business then the goods cease to exist rendering ideas of quality somewhat meaningless. Hence quality is often contingent on the existence of a platform and may be argued to depend on other factors such as performance.
- Goods in games are liable to change by game designers for reasons of game balance e.g. an item may have been offered that is too powerful for the game and reduces overall game play for all players. This raises a complex issue as on the one hand if a player is paying directly for an item of a certain power one might argue that they should gain that power, on the other hand it may be the case that if a change is not made all players suffer.

2.4 Alternative Money Systems

Virtual items, especially virtual currency, have established economic value irrespective of the views or contracts of online providers and, to a degree, irrespective of the views of regulating authorities. This raises a number of possible policy issues in respect of virtual currencies as alternative systems of value. The fact of an alternative money system raises a huge number of issues outlined in this section.

⁶ <http://webwereld.nl/nieuws/53234/virtuele-diefstal-voortaan-straftbaar.html>

Issues of alternative virtual currencies are not mere speculation. In 2007, officials from both the People's Bank of China and a prosecutor in East China's Jiangxi Province raised fears that Tencent's Q Coin might have an economic impact on the national currency which lead to a change in policy in respect to the use of game currencies in China.

2.4.1 Alternative payment

As long as there are enough people who recognize anything as an exchangeable token of value, then an item is a token of value and effectively a currency for that community. An issue arises when such a community becomes large enough for the alternative currency to be used for material exchanges.

2.4.2 Payment for 'illicit' goods and services (Alternative currency)

Mechanistically this is the same issue as the Alternative Payment issue noted above – the difference being that the Alternative Currency is being used (or at least is suspected of being used) for something that a given jurisdiction does not approve of.

Virtual currencies have been alleged to have been involved in many kinds of illicit activity in particular:

- Money Laundering
- Cross boarder transactions
- Funding terrorism
- Gambling
- Pornography
- Prostitution

The actual use of alternative currencies in these areas is not well documented in the public sphere though police authorities may have records.

2.4.3 Alternative value

The second, more esoteric issue is where a virtual currency is used only for items within a virtual space and for services within that virtual spaces; for example, someone within Second Life pays someone else for creating something within Second Life using Linden Dollars (the in-world currency). In this instance there has been an exchange of value – tokens have been exchanged for, effectively, computer programming. Those tokens may then be exchanged for some other good or service. Whilst the objects and the exchange remains in-world, it is undeniable that an exchange has occurred that could have used hard currency, which raises an issue of taxation and the problem of whether in-world transactions should be tax points.

2.4.4 Taxation hole

Like many online transactions such as eBay sales, it is widely believed that profits from sales of virtual items goes unreported. Their trade thus represents an undefined and under-reported element of the economy.

2.5 Overspending

A matter related to the nature of virtual items is the money that individuals spend on them. Micro-payment is the term given to the business model where each individual transaction is of modest size, i.e. typical transactions ranging from €5 to less than €1. However these transactions can add up.

Typically children, especially those under 15, do not own charge or credit cards; thus virtual spaces targeted at children have created a set of alternative payment mechanisms to enable this group of users to purchase virtual items. One common system, especially in Scandinavia, is the use of mobile phone SMS charging systems. Notably it is also common for the mobile phone contracts to be in the name of the parents, i.e. the children get the spending power but not the bill.

Just as in the case of standard mobile phone usage, the media have highlighted cases of teens 'over-spending' on virtual items, resulting in a surprisingly large bill for their parents.

2.5.1 Public Interest

There is a strong argument to suggest that over-spending is purely a parental issue. The phenomenon is not restricted to virtual items, as media reports have highlighted. What's more, without systematic studies or access to publisher transaction data it is difficult to tell whether there is any real effect or whether these are isolated incidents subject to media hype.

What's more, even if one does consider a policy intervention in these overspending cases, it is not clear where one should intervene. That is, should the intervention be at the point of the payment intermediary or at the virtual item intermediary.

A positive policy intervention might use the popularity of virtual items as an opportunity to educate children about fiscal responsibility.

Having said this, both Finland and China have looked at the issues of minors spending (see below for details).

2.6 Scope Creep: User-Generated Content

A secondary effect of online providers' responses to the issues noted in this document has been a broad claim of rights over content generated by users. That is, online providers have tended to take a position where all content on their

services is their intellectual property. This includes items that are ‘generated’ through user actions, e.g. virtual currency collected by a user as a reward for completing a task within an online game.

These property rights typically include all a user’s:

- Text input (including ‘private’ conversations);
- Group relationships, e.g. friend lists;
- Actions / gestures; and
- Creations, e.g. stories, objects, machinima, etc.

In some spaces this may also extend to:

- Viewing history (inside the space and links out)
- Physical location data

This reach of ownership has potential impacts on rights such as speech. It also has impacts on both personal and public archiving of virtual spaces.

3 Public Policy / Statute

3.1 China

3.1.1 Virtual (only) Currency Allowed

On 29 June 2009 the Ministry of Commerce of The People's Republic of China released a statement⁷ announcing that 'China has unveiled the first official rule on the use of virtual currency in the trade of real goods and services to limit its possible impact on the real financial system.'

Rather than banning virtual currency, the regulation limited its application, the key being: 'The virtual currency, which is converted into real money at a certain exchange rate, will only be allowed to trade in virtual goods and services provided by its issuer, not real goods and services. That is, virtual currency could be used in the context of a game but not as a substitute for hard currency.'

3.1.2 Real-name Registration & No Virtual Currency Trading for Minors

On 22 June 2010 the Chinese Ministry of Culture and Ministry of Policies, Laws and Regulations held a press briefing titled 'Online game Interim Measures'⁸. The regulations which were announced put three things into effect from 1 August 2010:

- All game players and users of social networking sites (both Chinese and non-Chinese) must register using a 'real-name' registration process including valid identification.
- Minors are banned from trading in virtual currency.
- New procedures were introduced for imported online games.

3.2 Finland

3.2.1 Spending Limits and Theft

Finland has not passed any specific laws in respect of virtual items; however it has interpreted existing laws as applying, at least in part, to some acts relating to them. In 2004 a voluntary agreement was formed between Sulake, publishers of Habbo Hotel, and the Consumer Ombudsman, setting a spending cap of €7 per week per account. Sulake have voluntarily extended this to other countries, setting the cap at around the local price of a cinema ticket.

⁷ <http://english.mofcom.gov.cn/aarticle/newsrelease/commonnews/200906/20090606364208.html>

⁸ China Government Bans Online Virtual-Currency Dealing Platforms for Minors
<http://www.bloomberg.com/news/2010-06-22/tencent-shares-fall-after-china-announces-virtual-currency-ban-for-minors.html>

It should be noted that the cap applies to all users, not just those who register giving an age under 18.

While volume-based limit may seem unusual as a policy intervention, it recalls policies applied by a number of Asian governments that applied statutory time limits on game-play.

Court cases relating to 'theft' of virtual items have also found that existing laws are applicable to them in at least some cases.

The laws that have been found to apply so far are:

- Voluntary cap on purchase of virtual items of €7 per week (at least in respect of Habbo hotel).
- Guardianship Act – purchasing of virtual items by minors falls under this act as they are not 'ordinary and inconsequential purchases'.
- Unauthorised use (Criminal Code (Act 39/1889) Chapter 28 - Section 7) can apply to unauthorised access to virtual worlds.
- Criminal damage (Criminal Code (Act 39/1889) Chapter 35 - Section 1) can apply to unauthorised sales of virtual items.

3.3 Korea

On 28 April 2006 Korea adopted the Game Industry Promotion Act. Amendments to this act applying directly to virtual items were adopted in January 2007 and then further clarified by the Supreme Court of Korea through a case in 2009. Breach of the act carries a potential fine (50 million won / €32,000) or a prison term up to five years.

The current situation is:

- Currency exchanges are illegal;
- It is legal for individuals to sell virtual items from games of skill;
- It is illegal to sell virtual items gained through 'abnormal' play, e.g. bots; and
- Individuals are taxed on sales of virtual times for hard currency between a lower and upper earnings limit; above this they must register as a business.

3.3.1 No Virtual Money Exchanges

The 2007 amendment to the Game Industry Promotion act made it illegal to buy and sell 'pay money' for business purposes, i.e. operate a virtual currency exchange. This amendment left ordinary users to free to buy and sell items.

3.3.2 Games of Skill / No Virtual Money Gambling

The Game Industry Promotion act also defined a difference between games of skill and games of chance, in effect making online gambling (e.g. online poker) and MMOs into different legal categories.

3.3.3 No Abnormal Play

The 2007 amendment to the Game Industry Promotion act also defined the notion of 'abnormal' play, and thus by implication defined a sense of 'fair play'. Abnormal play ruled out actions such as exploits (errors in game code that allow a player to gain unfair advantage) and bots (having a computer play a character in place of a human player).

Supreme Court of Korea

In January 2010 the Supreme Court of South Korea acquitted two players of the MMO *Lineage* of significant fines imposed by lower courts. Kim and Lee played *NCsoft's Lineage*, which uses in-game currency known as 'Aden'. They purchased Aden worth 234 million won (US\$207,558) from unauthorized web traders then sold this to other players for hard currency making a profit of approximately 20 million won.

A lower court found these acts to be against Korean criminal law and fined the defendants Kim and Lee five million and three million won (respectively) in a summary trial in March 2008.

These penalties were reduced at a full trial and in July 2009 the decision was overturned, with this appeal decision being upheld by the Supreme Court.

The focus of the debate between the lower and appeal courts was whether *Lineage* was a game of skill or gambling. The original court found the defendants guilty as it interpreted *Lineage* as a game of luck. The Supreme Court said that 'constant efforts to get as much Aden as possible can also be regarded as a game that requires much time and effort', hence *Lineage* is a game of skill. What's more, no evidence was provided to demonstrate that any of the currency had been gained through abnormal play.

3.3.3.1 Taxation (VAT)

On July 1 2007 Korea introduced a ruling that applied Value Added Tax to sales of virtual items for hard currency. A rate of 10% is applied to individuals who earn between 6 - 12 million won (\$6,000 - \$13,000) in six months. Those who earn above this amount must apply for a business license.

3.4 The Netherlands

3.4.1 Theft

The Netherlands has no specific laws for virtual items; however in at least one case this resulted in a judgment which found that the theft of virtual items through threats of force counted as robbery – in 2012 this ruling was upheld by the Dutch Supreme court. The applicable law in this case was:

- Dutch Criminal Code (Article 312)

3.5 United States of America

There have been no high profile court cases of virtual crimes of the type seen in other countries. The two main cases that have been brought have both involved Second Life, and as noted above, this virtual world has a different contractual and intellectual property model than most other virtual worlds. Hence both cases have sought to apply relatively standard law, albeit in a slightly altered way. The key law that has been clarified in part is:

- Lanham Act

3.5.1 Trademark in virtual space

Two cases involving Eros LLC established a number of clarifications in respect of virtual worlds, in particular that trademark could pertain to virtual items that only exist in a virtual space.

3.5.2 Minimum Contacts

Another Second Life case, Bragg vs Linden Lab and Rosedale (see above), while ostensibly about virtual 'land' ownership, was resolved out of court in a confidential agreement; thus the core of the case was not decided. However the initial judgment did provide indications on a number of matters, the key one in respect of virtual worlds.

Specifically Rosedale moved to be removed from the case on the grounds of lack of 'personal jurisdiction'; however the court took into consideration the fact that the Rosedale had 'met' Bragg by way of their avatars.

While not about virtual items this initial judgment does indicate a potentially interesting commercial legal point that may impact other cases.

3.6 United Kingdom

3.6.1 Illegal access

There have been very few cases involving the theft of virtual items in the UK. The few that have been, have tended to focus only on access to the computer system. Thus while the loss of virtual items may have motivated the act and the reporting of the act, legally this aspect has not been relevant to any actions. The act typically used in such cases is the:

- Computer Misuse Act 1990.

3.6.2 Legal Ambiguity

Not only are virtual items not explicitly recognized under UK law, software itself and online games have an ambiguous position.

In respect of software, it is unclear under English law whether it is a good or service. One case has suggested that if it is delivered on a fixed media then the media are a good but the software might not be. In the case of virtual worlds, some of these are and some are not delivered on fixed media.

In respect of video games, the laws that do apply to games specifically relate only to content classification. However these laws define games as being on a fixed media – hence online components of games and online games (especially ones not delivered on any fixed media) seem to fall outside this statute.

3.7 Taiwan

3.7.1 Theft

Certain virtual items can be stolen under Taiwanese law. This has been recognized by the Taiwanese ministry of Justice and in cases both before a 2003 amendment to the Taiwanese Criminal Code that clarified the position of ‘electromagnetic records’ and subsequently.

- Taiwan Criminal Code (Articles 323, 358 and 359)

4 Appendix: Dutch RuneScape Case

On the 31st of January 2012, the Supreme Court of the Netherlands found that items in the online game RuneScape had been stolen from a player. This is a ground-breaking case as it is the highest national court in the West to rule that taking virtual objects in this way is theft under national criminal law. This ruling may have broad implications for the online games industry.

The case dates back to 2007 when two youths used violence and threats of violence to force another player to log into the game of RuneScape. After the victim logged in to the game one of the defendants transferred virtual items and virtual currency from the victim's account to their own. The Supreme Court upheld the conviction for theft but reduced the number of hours of community service to be served (taking into account juvenile detention served).

The appeal did not turn on the material facts, i.e. whether there were threats made or items were transferred. Rather, the appeal centered on the question of whether what had occurred was 'theft' as defined by the law of the Netherlands.

4.1 Key Arguments

The key arguments against the incident being defined as 'theft' considered by the court were as follows:

1. Virtual items are not goods but an 'illusion' of goods made up of bits & bytes i.e. they are data
2. Virtual items are Information
3. The point of the game is to take objects from each other
4. The virtual items are and remain the property of the publisher of the game not the victim or the defendant - hence they could not have been stolen

4.1.1 The 'Illusion' argument

The court ruled that:

- Virtual items have value in virtual of the effort and time invested in obtaining them
- The value in Virtual items is recognised by those that play the game (including the defendants who went to the trouble to take them)
- The Virtual items were under the exclusive control of the player – who was relieved of this control

The court made reference to cases of electricity theft which is a similar intangible good but certainly has properties of power and control, and consequently can be stolen.

4.1.2 The 'mere data' argument

The court agreed that virtual items are data, but crucially added that they are not just data. That is, the fact that virtual items have data like properties does not mean that they don't also have properties that make them capable of being stolen. In particular the court noted again that the virtual item had perceived value and were under the exclusive control of a player.

4.1.3 The 'I was playing a thief' argument

The defence argued that one of the points of the game of RuneScape is to take virtual items from other players. The court noted that this was true but the way that the property was taken was outside the 'context' of the game.

4.1.4 The 'not your property' argument

The court agreed that under the RuneScape terms and conditions, the virtual items in the game are owned by the publisher of RuneScape who grant the players have a 'right to use'. However it concluded that the items in question were under the 'exclusive dominion' of the victim until they were removed from them, hence the position of RuneScape being owners of the items (from the perspective of intellectual property / contract law) is 'not relevant' in the context of the criminal case under consideration. Here the court made defense to money – which is the property of the state but can still be stolen.

In coming to these conclusions the court noted that it is down to the discretion of the court to determine whether *“due to the digitization of society, a virtual reality has been created, all aspects of which cannot be dismissed as mere illusion where the commission of criminal acts are not be possible”* [Google Translation with amendments by R Reynolds].

4.1.5 Significance

This case is significant because it changes the relationship between individuals and service providers in respect of digital objects. That is, RuneScape's contract clearly states that the players of the game do not own the game or any of the digital objects within it, whether they control them or not. This has long been a contentious matter as there is a large trade in the sale of objects between players for hard currency, so called Real Money Trading (RMT).

This ruling means that there is a degree of control that someone can have over an object which is sufficient for that object to be stolen. The question that has puzzled both the industry and academics for many years is: if a digital object is capable of being stolen, does this mean that other rights accrue to a player? For example, irrespective of what the contract says, can a player:

- sell an object?
- claim rights if an object is deleted or changed by company?

- claim compensation if a game is closed?

For the moment, this matter is restricted both to The Netherlands and to the specific matter of theft. However in China and South Korea there have been similar types of cases which have made it to the courts, in these judges have displayed a general trend to grant more rights to players than are stated in their contract and to see digital objects as being akin to physical property in certain important respects. The fact that a case in the EU has got to such a senior court and has ruled along the same lines is likely to carry some weight with other cases that may occur in the West.

5 Appendix: A tale of Two “Banks”

Second Life and EvE Online have both been home to so-called Banking Scandals, but publishers of each virtual world treated these situations very differently.

EvE Online is a space-based virtual world game that is treated by its players very much like poker – in that a fair degree of deception is seen as an essential part of the game. CCP, publishers of EvE Online, operate a strict rule that no virtual currency made be traded, i.e. the poker chips can never be cashed out.

In 2009 a group of players set up a ‘virtual bank’ within EvE Online where they held virtual currency on behalf of other players. Eventually one of the players ‘stole’ a substantial amount of virtual currency from the bank. CCP did nothing about this. The reason for this seeming inaction was that in EvE Online, things like online piracy are part of the game, and nothing was done outside the game rules. The player in question was eventually banned from the game, not for the so-called theft, but for selling the ‘stolen’ currency for hard currency.

In 2007 a ‘bank’ in Second Life called Ginko Financial ceased operations. At the time the bank held 200 million Linden dollars - the equivalent of approximately €750,000. In 2008, partly in response to this, Linden Lab banned Second Life ‘banks’, stating⁹ ‘it is prohibited to offer interest or any direct return on an investment (whether in L\$ or other currency) from any object, such as an ATM, located in Second Life, without proof of an applicable government registration statement or financial institution charter.’

- end -

⁹ http://wiki.secondlife.com/wiki/Linden_Lab_Official:New_Policy_Regarding_Inworld_Banks