The Value of Virtual Assets – The Role of Game Characters in MMOGs

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Abstract

Game character, or avatar, acts as the nexus of virtual assets that the player collects and produces while exploring online game worlds. What is the value of this virtual identity in the online game community? Furthermore, what are the components of play that provide added-value to the players? The evolution of Massively Multiplayer Online Games (MMOGs) has been dramatic for the past 30 years. What has remained stable, however, is the role of game characters as the main channel for value growth and perception. In this paper, we apply game studies background in order to offer implications that would contribute to the field of business. By using the motivational framework with the game characters as focal point, we will point out the specific value structures that emerge in contemporary MMOGs.

Keywords: games, virtual worlds, virtual economies

1 INTRODUCTION

The seemingly virtual domains of massively multiplayer online games (MMOGs) have escaped the boundaries of cyberspace. Virtual economies, artificial currencies and intangible property are all inherent phenomena of contemporary virtual worlds that exist in the depths of the computer devices and networks. The likes of science fiction authors William Gibson (1984), with his *Cyberspace*, and Neal Stephenson (1992), who used the term *Metaverse*, have long ago predicted the future of networked online communities. While the society has perceived these as mere fictional playgrounds, the virtual worlds have slowly evolved to places and spaces of – at least – half-real assets.

There are numerous examples of cases that illustrate the shift and crossover between virtual and real. Making a profitable business by selling virtual property (Anshe Chung Studios 2006; BusinessWeek online 2006), running a 'gold farmer' company whose only aim is to collect and sell virtual resources (BBC News 2006; TheObserver 2005) and of course the wide spread auctioning of ones game characters (Washington Post Online 2005; BBC News 2005) are just but a few occurrences of future trends in economy. From the business point-of-view, these examples are far from the domain of 'playgrounds for kids'. The money involved is real money and these people make a living out in the cyberspace.

In this article we discuss the evolution of MMOGs by analysing the value of virtual assets in these non-physical realms. Since the central role of game characters as virtual asset 'warehouses' is the key, we align our approach to character-oriented study. We tackle the question of what is the value of ones virtual identity in the online game community. Furthermore, we delineate the motivation components of play, in relation to the perceived net worth of different aspects of character value. We approach the topic from the field of game studies, but we focus on the implications that would contribute to the field of business.

Before venturing into the intricacies of virtual assets, it is necessary to offer a rationale behind the evolution and success of MMOGs. We will start by defining the concept of MMOGs by outlining the most distinctive characteristics of these virtual worlds.

2 FEATURES OF MMOGS

MMOGs belong to a distinctive field of virtual worlds which are neither plain chat rooms nor traditional video games. Although MMOGs generally possess qualities and features from both of the aforementioned 'sisters', they have many properties that are unique in the domain of online systems and services.

According to Bartle (2003, 4), most of the MMOGs adhere to certain conventions that distinguish them from other virtual spaces. Table 1 outlines the most important of these conventions and describes the potential business implications of each of these.

MMOG Convention	Potential Business Implication	
The world has underlying, automated rules that enable players to effect	There is a more or less dynamic physics model that allows, for example, construction of buildings, harvesting of	
changes to it.	resources, or other manipulation of the surrounding objects.	
	\rightarrow construction of virtual goods, value-chain structures	
Players represent individuals in the world. This is their character and all interaction with the world and other players is channelled through characters.	The player has a proxy in the form of game character, which is the main instrument and interface for interacting with other players. Usually, only one acting character at any point of time is allowed, although the players may alternate among several.	
	\rightarrow virtual identity, trust catalyst, transaction platform	
Interaction with the world takes place in real time. When you do something in the world, you can expect feedback almost immediately.	The MMOGs operate like simulations of artificial worlds where majority of the activity is executed by human participants who all add to the emergent nature of the system. \rightarrow consumers-producers diverse motivations and needs	
	y consumers producers, arrest montations and needs	

Table 1: The conventions of MMOGs.

The world is shared, so there are other participants that act and play in	'Massively multiplayer' means that the online games can have hundreds, or even thousands, of simultaneous players. The	
the virtual world.	large number of users generally create interesting potential for virtual – and real – economies.	
	\rightarrow markets, communities and trends	
The world is at least to some degree persistent, i.e., constantly up and running.	Since the MMOGs are usually persistent virtual worlds that stay on even if the player is not logged in, the worlds evolve and other players continue their activities 24/7 – there is no downtime, except during the maintenance breaks.	
	\rightarrow long-term value, 'stable' investments, constant processes	

3 A BRIEF HISTORY OF MMOGS

While the history of MMOGs is by far too rich to be exhaustively discussed in this paper, we will provide a brief outline of the most influential developments by bridging the key issues with the potentially important implications for virtual and real economies. Figure 1 illustrates some of the key MMOGs that emerged during this 30-year period. The history of MMOGs starts in the late 70s with systems that hardly resemble the contemporary multimedia spectacles available on the today's Internet.

Figure 1: Development of MMOGs from MUD to World of Warcraft and Second Life.



MUDs – Multi-user Dungeons

The first multi-user dungeon, or *MUD1* as it was later dubbed, was programmed on a computer mainframe at Essex University, England, in the fall of 1978 by Roy Trubshaw. His work was then continued by Richard Bartle. The inspiration behind MUD came from single-player adventure games, like Crowther and Woods' *ADVENT* and Anderson, Blank, Daniels and Lebling's *ZORK*. (Bartle 2003, 5). The MMOG phenomenon, therefore, can be said to have started almost 30 years ago.

As an interesting side note about the evolution of MMOGs, the original text-based MUD (*MUD1*) had no formal currency whatsoever. Although the idea of putting money into MUD1 was suggested many times by its players, the designer resisted because of the fear of inflation in the virtual world. (Bartle 2003, 299). Had this tendency continued, the world of MMOGs would be quite different today.

From the 1985 onwards many of the MUDs went on to achieve commercial success as part of early online services. However, most of the evolution of these text-based virtual worlds occurred within the academic domains of universities. This spawned MUDs like *AberMUD*, *TinyMUD*, *LPMUD* and *DikuMUD* (Bartle 2003, 9). Of all these examples, it was *TinyMUD* that laid down a track that still has important consequences. Since *TinyMUD* was not actually a game, the players spent most of their time creating things and talking about their creations (Bartle 2003, 9). Naturally, all of these were textual representations stored within the memory banks of the computer network. Regardless of the media, the self-created virtual assets were valued as one of the most significant artefacts in the online domains. The likes of *Second Life* (Linden Lab, 2007) follow this path even today.

Finally, the big bang of virtual worlds emerged in the form of *LPMUD*. The author Lars Pensjö, having played both *AberMUD* and *TinyMUD*, decided to write his own game with the adventure of the former and the user extensibility of the latter. He developed an in-game programming language LPC that allowed players of sufficient experience to add not only objects, but also powerful functionality to the game as it ran. (Bartle 2003, 10). The era of user-created game content had begun.

Dawn of Graphical MMOGs

Although there are early examples of graphical MMOGs like *Oubliette* (1977), *Avatar* (1979 on PLATO), *NeverWinter Nights* (1991 on AOL) and *Shadows of Yserbius* (1992 on ImagiNation Network), the biggest impact was made by *Ultima Online* (1997) with its 100000 subscribers by the end of the first year of operations. From the start, *Ultima Online* was conceived to be a richer and deeper virtual world than a typical MUD, with an emphasis on community building, player-driven action, and the ability to accommodate different playing styles. (Bartle 2003, 17-22).

The innovative nature of *Ultima Online*, however, caused some interesting problems. For example, the means by which players were punished for attacking each other's characters was not effective. Furthermore, the detailed ecological model employed broke down when players rapidly killed everything that moved and, thus, the economy collapsed after a bug led to hyper-inflation. (Bartle 2003, 22). Nevertheless, *Ultima Online* was the benchmark MMOG for several years before its rivals could catch up.

While *Ultima Online* was a commercial success, the same cannot be said about *Meridian59* (1996). Launched a year ahead of *Ultima Online, Meridian59* was the first graphical virtual world, since the days of *Avatar*, to employ a first-person point-of-view. The reasons behind the failure of *Meridian59* are numerous, but the main reason for its only modest success was that it came to market a touch too soon. This, however, was not the case with *EverQuest* (1999). (Bartle 2003, 23-25).

Among the Big Ones

EverQuest was exactly in the right place at the right time. It was basically a *DikuMUD* with a graphical front-end (client) bolted on. But, on the contrary of its competitors, *EverQuest* was able to reach the critical mass of players. Actually, *EverQuest* was so successful that within two years of its launch, over a hundred of graphical virtual worlds had been announced as being in development. These include the likes of *Asheron's Call* (1999), *Anarchy Online* (2001), *Dark Age of Camelot* (2001), *Sims Online* (2002), *Star Wars Galaxies* (2002) and *Asheron's Call 2* (2002)

Outside the published success of the western MMOGs, there have been others that are even bigger in terms of number of subscribers and revenue collected. The first place would clearly go to *Lineage*, which was published in 1998 by NCSoft in Korea. Being a year ahead of *EverQuest* makes *Lineage* as one of the pioneering successes. Unfortunately, the 2001 launch in US did not produce as successful subscription rates, hence the western world seems to have ignored the massive number of customers *Lineage* was able to attract. (Mulligan & Patrovsky 2003, 327).

With all the preceding success stories and quiet failures, there is one MMOG that has risen above everything else. *World of Warcraft* (Blizzard Entertainment 2007), with its claimed 8+ million subscribers, dominates the field of virtual game worlds. What seems to be even more significant is the fact that *World of Warcraft* has been able to break the East-West boundaries of MMOGs. Naturally, all this means tough times for potential competitors. The sheer mass of players brings the impact and complexity of a virtual economy to a totally new level.

Finally, the recent years have witnessed another track on virtual worlds that essentially draw upon the likes of *TinyMUD*. The over 2 million registered users and numerous real businesses with virtual branches have made Linden Lab's *Second Life* (2007) as a truly interesting phenomenon. While gaming is not the main focus here, the modifiability and possibility to bring in your personal content have captivated the dwellers of virtual worlds. The free basic entry policy guarantees the influx of new members and, hence, attracts the businesses that produce added value. Being together is the key - with more users there are more possibilities for business and pleasure.

4 PLAYING TOGETHER IN MMOGS

Playing together is inherent to both animals and humans. Multiplayer games are by no means a new innovation. Football, ice hockey and numerous other games cater for multiple simultaneous players who jointly participate in creating the overall game experience. Playing together is as old as games themselves - people (and animals) have shared the play experience with their peers since the dawn of existence. There definitely is social function involved with games. To quote the words of Roger Caillois: "Play is not merely an individual pastime. It may not even be that as frequently as is supposed." (1961, 37) Actually, one of the seminal accounts on playful culture, discussed by Johan Huizinga (1950, 1), starts by illustrating the young puppies playing together and experiencing tremendous fun and enjoyment while doing so. Being together is more fun than being alone.

This pull towards social play activity can be seen as one of the driving forces behind the evolution of multiplayer online game worlds. As commented by Csikszentmihalyi (2002, 168), almost every activity is more enjoyable with other person around, and less so when one does it alone. People seem to

be more happy, alert, and cheerful if there are others present, compared to how they feel alone. Based on this, it has been only a matter of time – and technological development – before the social togetherness transferred into the domain of virtual worlds.

If the digital game is played together with other people, the social interplay is enhanced by numerous traditions that are inherent in the interactions of physical world. The greatest advantage of these multiplayer games is that they transform computer games into truly social experiences. The social bonding can be so strong that it becomes one of the most important motivating factors for people to play games (Rouse 2000). Furthermore, the social presence of other human beings demands additional skills from the players. In most of the multi-player games, social skills are needed, or must be developed in order to succeed (Aarseth 2001). All these skills and actions need a platform where they are projected from. This is where the avatars, or game characters, come into the picture.

5 GAME CHARACTER AS A PROXY FOR INTERACTION

The main difference between virtual worlds and the physical one is the need for avatar, or game character, to act as a representation of your physical self. The character is player's representative in the game world and can generally take any form, shape, or a specific perspective (Friedl 2003, 172). Since this avatar is the proxy for most of the actions you do in the virtual world, without it you are nothing in MMOG – you do not exist and, hence, there is no value to be calculated. Without a character the player is just an invisible spectator who has no say in the happenings of the virtual world. The importance of game character originates from the early pen'n'paper role-playing games (e.g., Gygax & Arneson 1974) where your main aim was to execute adventurous quests and develop the stats of your character while doing so. The game character became a tool for player's actions. The role-playing, fighting, micro-management and all the other actions were channelled through game character.

Furthermore, a game character in MMOGs is also one's interface to other human players (Friedl 2003, 173). Game characters are constantly read and interpreted. The expressions and movements, performed by the players, are communicated through the characters into the game world. Players adjust their behaviour and decide their responses based on the cues they read from other characters. Moreover, besides being an interface between individual players or the player and the game world, player can form a relationship directly with the character. By giving the character a sense of personality, unique behaviour, intentions, and style, a player starts to form a relationship with the character. The player starts to understand the game character as a second self, as something to protect and worry about, as one's role in the virtual game world. (Friedl 2003, 185).

While the game worlds consist of other objects than just a collection of game characters, many of the actions revolve around these virtual proxies. There may be a possibility to buy a house (a home for the game character), collect better armour and weapons (protection for the game character), or just chat with your fellow players (words projected out of the game character). The game character, hence, is the focal point of all these virtual realms. While the games have evolved during the past 30 years, the importance of the avatars has remained.

6 ASPECTS OF GAME CHARACTER VALUE

Since game characters play essential part when participating in game activities, we will examine the elements that constitute a character's value to the player. As a framework for different character value components, we use Yee's (2006) categorisation for motivations of play in online games. Yee's model is formed through factor analytic approach utilising survey data collected from 3000 players on several different MMOGs (e.g. *EverQuest, Dark Age of Camelot, Ultima Online,* and *Star Wars Galaxies*). Yee (2006) divides motivations of play into three main categories: *achievement, social* and *immersion.* These categories are further divided into subcategories that depict the nature of each category in more detail (see Table 2). In our examination, we use the main categories to structure the discussion and point out examples that relate to the subcategories.

Achievement	Social	Immersion
Advancement	Socializing	Discovery
Progress, Power,	Casual Chat, Helping	Exploration, Lore, Finding
Accumulation, Status	Others, Making Friends	Hidden Things
Mechanics	Relationship	Role-Playing
Numbers, Optimization,	Personal, Self-Disclosure,	Story Line, Character
Templating, Analysis	Find and Give Support	History, Roles, Fantasy
Competition	Teamwork	Customization
Challenging Others,	Collaboration, Groups,	Appearances, Accessories,
Provocation, Domination	Group Achievements	Style, Color Schemes
		Escapism
		Relax, Escape from RL,
		Avoid RL Problems

Table 2: Motivations of play in online games (Yee 2006, 774)

7 ACHIEVEMENT VALUE OF A CHARACTER

Salen and Zimmerman (2004, 80) define game as "a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." Even though they criticise role-playing games having no final end game (i.e., final quantifiable outcome), they agree that session-to-session missions, or quests, may have quantifiable outcomes. Besides the quests, character development, as part of the game, has stages that can be seen as quantifiable outcomes. In MMOG, a player needs to invest time in learning how to play the character. Especially in the case of role-playing games, the player needs to invest time in improving the character's skills. Creating competent enough character for the challenging quests is a long and time consuming process. In the beginning, characters have only modest skill levels which need to be trained. Completing quests or missions, slaying beasts, crafting artefacts, or harvesting minerals gain experience points that, at times, result in levelling up. This means that the game character gains an amount of numerical points that the player can use to increase different skills the character possesses (e.g. weapon handling, healing, or magical abilities). In this manner the character advances periodically towards the chosen direction (e.g., becomes more skilful warrior, thief, bard or monk).

Completion of the quests and levelling up the character statistics (i.e., the quantifiable outcomes) are clearly achievements for the player who controls the character. According to Yee (2006), achievement is one of the thriving forces for playing an online game. Players get satisfaction from advancing, competing, and being self sufficient in the game. Players enjoy becoming better in achieving the chosen objectives and excelling over each other. From the business point-of-view, this indicates the potential of development structures that allow the players to increase the value of their virtual assets in concrete.

Achievement value of the character can, therefore, be seen as covering two main aspects: 1) the elements that constitute to the overall numerical competence of the character in the game world, and 2) the status achieved either through social dealings or through excellence in competing with other players or mighty non-player opponents. Elements constituting to the overall numerical competence of the character are the artefacts and wealth the player acquires for the character (such as weapons, armour, potions, gold, and even virtual property), as well as the improvements in the character's skilfulness (i.e., the character statistics). Artefacts and wealth can be collected by completing quests and executing other gameplay activities. The second aspect regarding the value of the status is harder to measure. However, it sums up in the admiration the player, or her character, receives from her fellow players. The greater the legend you become amongst your online friends, the better the feeling.

8 SOCIAL VALUE OF A CHARACTER

Most of the MMOGs cater for activities other than pure gameplay. This provides players a possibility to select goals of their personal liking, or to simply hang around in the game environment. The freedom allows players to share their experiences about the game but also strengthens the possibilities for the emergence of more permanent play-communities. As Huizinga (1955, 12) argues: "A play-community generally tends to become permanent even after the game is over. Of course, not

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every game [...] leads to the founding of a club. But the feeling of being "apart together" in an exceptional situation, of sharing something important, of mutually withdrawing from the rest of the world and rejecting the usual norms, retains its magic beyond the duration of the individual game." In the case of MMOGs, players may follow the built-in game structure, but they may as well choose their own game independent elements such as exploring the game world or taking part in social activities. Therefore, character's value is not only about how competent it has become game-wise, but also about the areas of social connections and experiences built during and after the gameplay.

Many of the quests in MMOGs are built to encourage teamwork. It is often really hard, or even impossible, to complete certain quests without teaming-up with a properly formed group (i.e., the group that has game characters with complementing skills) (Jakobsson & Taylor 2003, 83). Since the death of a game character often results in the loss of experience points and other virtual assets, the players generally feel the need to trust in each other. Your character's life is partly in the hands of your team players. If you do not manage to communicate properly, or, if your group members decide to flee and leave you in the midst of the raging battle, your character is most likely to die. After playing several quests within a same group, or after taking part in guild activities, the player and her character start to gain reputation. Some of the players/characters are known as trouble makers while others are known of their just behaviour and/or good playing skills (Jakobsson & Taylor 2003, 85-87).

Social value of the game character concerns aspects related to other players. The value can be considered from at least two perspectives: 1) meaningful social interaction with other players, and 2) the image of the player formed in the eyes of fellow players. The social value is, therefore, a resource for being able to form meaningful connections that, at their basic level, provide a possibility for casual communication and teamwork. On a deeper level the casual connections can turn into friendships, or even romantic relationships, in which the social value may well exceed the boundaries of a mere game. From the business point-of-view, the strong bonding of players offers interesting possibilities, for example, in the form of community services, trust-brokers, transaction mechanisms and reputation ladders. Many of the conventions of real world commerce apply to the MMOG societies. However, the ambiguous implementation of aspects, such as, identity, contracts and social-components of transaction procedures, makes it challenging to integrate traditional business models within the online games.

Finally, the image of the player comes into the picture especially in the organised forms of social play, such as, guilds and other consistent groups. It is not necessarily the other players that form the addictive component, but the image one gets of oneself from other players (Ducheneaut et al. 2006, 413). Furthermore, in guild activities concepts such as *trust* and *reputation* become essential as part of the player image (Jakobsson & Taylor 2003, 85-87). Some of the guilds require a certain amount of playing hours or certain percentage of attendance in guild activities, such as, meetings and raids. If you are willing to live up to your *responsibilities*, you may advance in the guild. If you fail to meet the requirements, you may be kicked out. Letting someone else to play your character could, therefore, potentially result in tremendous consequences.

9 IMMERSIVE VALUE OF A CHARACTER

Immersion into the MMOG can be achieved through many different elements. Yee's (2006) subcategories list elements, such as, discovery, role-playing, customisation and escapism. When considering immersion from the game character point-of-view it is obvious that some elements are more essential than others. What is elemental, however, is the need for the player to be able to identify with the game character. Sociologist Gary Alan Fine (1983, 214-215) discusses the importance of identifying with the character and comments that "players must invest their character with meaning. [...] For identification, the character must have attributes that permit a player to esteem that persona." Quite similarly, but from a bit different point-of-view, Friedl (2003, 185) argues that "if a player has the possibility to give this avatar a sense of personality and contribute his unique behaviour, intentions, and style to the game world, he will establish an individual relationship with the character."

MMOGs commonly provide game characters that have attributes such as distinctive appearance, changeable clothing, as well as, armour and weaponry that indicate the desired playing style. Furthermore, interaction with other players and the game world, through the game character, offers possibilities to develop and share a unique personality, story lines and character's history. This type of interaction enables the role-playing of the character. The role-playing may be about constructing and representing a fictive persona, or just an experimentation of the selected parts of players actual self (cf. Turkle 1999, 643-644). However, the persona of the game character does not form immediately. When playing a character for a long time, the player starts to identify with it and begins to feel what the character "feels" (Fine 1983, 217).

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Based on the aforementioned theories, immersive value of the character deals with aspects that build up an image of the character and make establishment of individual relationship possible. A player may not be actively trying to role-play the character, but through discovering the world, taking part in quests, and socialising with other players, an image of the character starts to emerge. This image can be further altered through customisation of appearance and style of the character. Player invests her time and shares memorable adventures with her game character. If the player also empathises with the game character, it is possible to immerse into the character, as well as, to the world - through the character. The investment of time and the empathic approach to the character may also result in player wanting to think back the events shared with, and the qualities built for, the character. In this way the character gains sentimental value.

The immersion aspect of character value has mainly been ignored by the business applications. Although the games provide a platform for player immersion, there are no mechanisms that would directly support, or even increase, the construction of added-value. Personal records, virtual scrapbooks and other fan sites indicate the need of the players to both share and store their game experiences. User created content, in this form, could be integrated to the commercial game systems since the role of the content is mainly that of supporting to the overall gameplay experience.

10 OVERLAPPING VALUE ELEMENTS

Even though players may have clearly dominating motivations to play, it is common that the overall motivation arches over multiple elements from different subcategories (compare Yee, 2006). Most of the MMOGs have been built in a manner that requires most of the motivations to be pursued, at least to some extent, if the player wants to advance in the game. For example, it is hard to explore the world (immersion) without developing your character (achievement), since some areas have so powerful foes that the low-level character would not be able to survive. Similarly, as already noted earlier, many of the quests are built to encourage teamwork, hence character development and social communication are equally important. The overall value of the character cannot, thus, be measured by only basing it on a single value component.

The overall value of the character can be seen as a sum of the achievement, social and immersive components (see Figure 2). Depending on the case, one or more value components will be emphasised. By using this model, the game activities and player preferences can be analysed and their effects on the gaming community with potential business implications can be considered. For example, a player may dislike levelling up the character, but because of the immersive and/or social motivations he needs to pursue the achievement element. In this case, she might want to get a higher level game character without needing to go through the tedious achievement process. These types of opportunities can, however, have reflections on how other value components are viewed. The value of the character becomes evident only through the individual relationship formed via interaction between the player and her game character.



Figure 2: Different value components overlap and sum up as the overall value.

The relationship between a player and her game character forms during a period of time that can, for many players, be rather substantial. The players will generally go through most of the motivational forces - at least to try these out. Some parts of the game character may be more or less trivial for the player, but can nevertheless contribute to the overall image of the character. A player may, for example, purchase some additional levels for her game character, but this does not necessarily mean that the character's identity becomes different. It is the overall time the player invests in different value components that matters to the player. The interaction between the player and the character creates a *role* which becomes the *virtual identity* the player assumes while present in the game world. It is this virtual identity that holds the value of the game character in the online game worlds.

11 EXAMPLES OF VALUE PERCEPTION AND CONSTRUCTION

In this Section, we illustrate a series of empirical cases that offer insight into the various value constructing examples evident in MMOGs. The examples are organised according to the aforementioned player motivation model and each of the cases illustrate different approaches to perceived value of a game character.

Achievement Value

Achievements can generally be seen in the character. Level 60 character looks a lot different than level 10 character. High-level character's armour and weapons have become bigger and/or more fanciful. Experienced character possesses items that low-level characters have not even heard of. Veteran character has guts to attack powerful foes and it can spread tremendous damage. The progress made in game, thus, affects many of the aspects of the game characters. But what is the worth of all the experience levels? Basically everyone can reach high levels. MMOGs do not ask that much skill for playing. On the contrary, they are rather easy to play but ask a lot of time and patience - at least if concentrating on improving character statistics to high levels. This has made character, experience level, and item sales possible. Companies such as *Gamepal.com* buy and sell characters, levels, gold and other valuables that can be used in the game. The service includes many of the existing MMOGs, such as *World of Warcraft, Everquest 2* and *Star Wars Galaxies*. For example, a general price for a *World of Warcraft* account having 50-60 level character is ranging between \$200 to \$400 and power levelling of one's existing character costs about \$20 to \$300 depending on wanted levels. In this way, if a player finds levelling a tedious task, she can cut down the character development time and make a shortcut to the activities requiring higher character level.

The nature of achievement value cannot be measured only in selling or buying of ready made characters and levels. Value is also related to the advancement of the character itself. A player may receive sheer joy from the advancement as in: "It gives me the illusion of progress, I know that. I hate the level of frustrated progress in the r/w so I play the game and lvl up instead. It is *crack* for the achievement center of the brain, like cocaine affects the pleasure center." [M, 34] (Yee, 2005). Advancement is, however, also used to gain recognition from other players as clearly illustrated in: "I basically play these games to become the most powerful force the game can allow. I want the best of the best items and people to truly respect my play style. I want to become a legend among players within the virtual mmorpg world!" [M, 25] (Yee, 2005). But what happens to the value of the character stats? Is the player still proud of her character? Or, more importantly, is the player having fun?

The boundaries between play and work seem to be immediately demolished when one thinks about the value of achievement. If the player decides to invest her time in advancing her game character, there is a great chance of playing turning into work. Or, as stated by a competitive player: "My desire to stay competitive drives me to want to level fast, min-max, and gain rare drops. Those things in themselves aren't important to me, and I'd really rather it weren't important to the game, but if I intend to be competitive I've got to do the work to have the fun." [M, 19] (Yee, 2005). The value of achievement, in this case, is so high that the player is voluntarily 'working' in order to reap the rewards in the form of occasional fun – and all of this in-game. Naturally, he could just purchase the laborious parts of the resource-gathering and invest his time on the more *ludic* activities. Value, as in all of these cases, is in the eye of the beholder.

Social Value

Players in MMOGs approach in-game relationships differently. Some regard them as being superficial while others value them similar to real life relationships (Yee, 2003a). The approach a player takes on the game will have an effect on relationship forming. One player comments the issue of

meaningful relationships in MMOGs as follows: "I've made many friends in games who become outside-of-game friends because we have a lot in common, same maturity level, looking for the same things in a friendship, and just click. I would call these very meaningful. But I also have many friends in games who are just sort of there to pass the time while I play... they're silly and fun to chat with... but I'd never want to deal with them outside of the game. Those relationships I would label as superficial" [F, 22] (Yee, 2003a). According to the questionnaires collected by Yee in Daedalus Project (2003a), it is common to form lasting online friendships. The results reveal that 40% of the players feel that their online friends are comparable - or better - than their real life friends. This clearly suggests that the social role assumed in the virtual community adds immensely to the overall value of the game character. Many players have made good friends and some even got romantically involved through online relationships (Yee, 2003b). Players may try to be themselves or a fictive persona, but in both cases the relationships have been formed through the character.

Furthermore, MMOGs do not usually let you to change your identity (i.e., name and character appearance, excluding wearable items), which can greatly raise the value of your character. If a player would sell her account, she would potentially loose many of the formed relationships. A player could, in theory, build up these relationships by stating who she actually is, but this could be rather tedious task to perform. According to Yee (2003c) some evidence for this can be found from the results that over 50% of female players (who value relationships in game more than males) and more than 30% of males wouldn't sell their account for any price.

Guilds are rather common structure for organising play activities in MMOGs. The guilds offer an interface for getting in and familiar with gaming communities. Through a guild a player can find regular company to tackle different quests. Casual friends or even friendships formed through a guild activities are, however, not the only social value guilds have to offer. Since guilds are active communities arranging playable content, they need players on different levels to organise various tasks. By being active in guild organisation, a player can improve her social skills but also learn organising and leading skills. One player describes this as following: "Last year, I was elected as the leader of the guild I'm part of when our old leader (a good RL friend) left. At first, I was a bit concerned about my ability to organize 100 some people from all over the world, but, as it turned out, I learned that I was much more organized that I had thought I would be, and ... that I had an uncanny knack for diplomacy and leadership. The experience made me feel very empowered, and good about myself [...]" [F, 34] (Yee, 2002). This suggests that MMOGs can have life changing effects.

Perhaps the most interesting set of case examples considers the far reaching and intense effects of social values. For example, "A Story About a Tree" by Raph Koster is signifying the issue that MMOGs are not "just a game" (Bartle 2003, 209). In this case, a player named Karyn was found missing from the *LegendMUD* and after a quick check on her personal website, the community realised she had died two months ago. This started an immediate outpouring of grief in *LegendMUD*. There were numerous email consolidations, memorial service, and even a garden of remembrance with a tree bearing a plaque: "In memory of Karyn." (Bartle 2003, 209). Whether real stories or urban legends, the heart-breaking accounts of genuine sense of loss over someone the players have never actually met in real life, signify the uttermost personal value. The value of a player feeds the value of community, and *vice versa*.

Immersion Value

In terms of customisation, as part of the immersion component in the motivation model, the current value structures are more or less straightforward. You either invest your time in collecting personal gear, or, you pay extra to become more individual. The extra-payment scheme is actually a valid business model of the likes of *RuneScape* and *Habbo Hotel*. While the basic entry is free, you can purchase something extra with real money and, thus, become different from everybody else. For example, in *Second Life* you can spend your (real) dollars to customise your avatar. The science-fiction vision of Stephenson's (1992) *Metaverse*, with its budget-segregated avatars, seems to become more concrete year by year.

The final set of value cases is perhaps the most difficult to concretise since the concept of immersion – by nature – is highly psychological. There are, however, some typical trends in MMOGs that provide us clues about the potential value structures. Let us start with our personal expedition as *Gopher Tail Minstrels (or GTM)*. GTM was a group of adventurers in the world of *Asheron's Call 2* who, just out of curiosity and for the sake of fun, formed a party of troubadours. The main point here was not the public performances – although those occurred frequently and usually with keen crowds – but the role-playing of something that fell outside of the pure hack-and-slash pursue of points. After several months of gigs, numerous explorations to remote and desolate areas, and constant gathering of data (i.e., screenshots), the motivation to play faded. However, the memory of GTM never disappeared.

After a disastrous server crash, the only survived screenshot (Figure 3) remains as a testimonial of the days long-gone. The price tag for the additional images might easily become phenomenal, since there is no other concrete evidence of the life of GTM.



Figure 3: Gopher Tail Minstrels in action somewhere in the realm of Asheron's Call 2.

Actually, the case of Gopher Tail Minstrels is by no means unique. The loss of one's game character may well be more than just a loss of virtual artefact. And people may react very strongly in that kind of situation: "On December 25th, 2006 I woke up to a big surprise. No, not a big pile of presents! I woke up to find my World of Warcraft character no longer existed. You may say, 'Sure it's just a video game, what's the big deal?' Oh, when you put 286 days of playtime in one character, it is a huge deal." (My Crazy Blog 2006). This player, according to his own testimonial, was prepared to sue the guilty party with no expenses saved approach. He continues: "Now, for the fun part. Finding a law firm that will pursue this case. I will be suing for the 286 days of life this man stole from me, and the \$2000 it cost me to figure out everything about him." The value, in this case, is not just memories. It can grow to become something even money cannot buy.

12 DISCUSSION

The aforementioned cases provide some practical implications to the field of business studies. While the roadmap from existing MMOG to a future business platform is not always clear, there are several key areas that could be harnessed. In essence, all the motivational components of play, form potential areas for commercial applications. This, however, should not result the players being charged more rigorously. Instead, the existing subscription-based business model, could be replaced with transaction-oriented mechanisms that offer ways for user-created content – and business. *Second Life* is a living example of value-adding procedures and virtual asset transaction.

The initial argument states that the more persistent the virtual world is, the greater the need for a formal economy (Bartle 2003, 299). This, however, is not the only approach in contemporary MMOGs. The spin-off businesses (e.g., auctions, gold farming, power-levelling, etc.) all add to the original economy model of the MMOGs. In addition, the concept of MMOG aggregators that integrate several different virtual worlds would make it possible to achieve true interconnectivity between the games. The virtual is not bound within the frames of formal computer systems. The cross-over to the real world has come to stay.

In their own field, MMOGs are rapidly advancing our shift towards game society. Basic ICT and Internet skills will not be enough since people need to master games and playing. Furthermore, people may need to master the business models and structures of virtual economies - with all the ripple effects to and from our real economies. The secondary markets with trading of virtual assets outside the MMOGs, and the novel but difficult to harness value chains provide interesting challenges for both researchers and practitioners.

Still, perhaps the strongest implication of the evolution of MMOGs might be the level of persistency these worlds possess. They currently do have a limited, yet substantial in duration, life span of 5-15 years. What will be the outcome if we truly have MMOG aggregators and systems that can keep your virtual property current year after year? When will the virtual become non-virtual? What is the threshold that needs to be crossed in order for us to start thinking these artefacts as real as the physical ones? Mobile phone life-cycle may be 1-2 years, average consumer products tend to 'last' less

time than they did 10 years ago. The virtual home, built in *AlphaWorld* (nowadays *ActiveWorlds*), that is 20 years old cannot, by any means, be defined as quickly vanishing fad. Actually, it may have lasted longer than many real world houses.

Finally, the question of what is the value of ones virtual identity in the online game community remains a multifaceted problem. Since the perception of value differs greatly from one player to another, there is no concrete solution to the problem. However, through the motivational framework, and by illustrating the role of the game character as main tool to operate in MMOGs, we are able to point out the specific value structures that emerge. If the future business models are able to harness these basic value components, there may be room for development in MMOGs. With diversified added value mechanisms and clear option to select ones personal format of investment, the online games could truly become the *cyberspaces* and *metaverses* of tomorrow.

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