

## ***Digital Natives' Purchasing Behavior in Habbo Hotel***

**Matti Mäntymäki**

Turku School of Economics, University of Turku, Finland

matti.mantymaki@utu.fi

**Jari Salo**

University of Oulu, Finland

jari.salo@oulu.fi

### **Abstract**

*Purchasing virtual products and services in virtual worlds is a rapidly growing form of online consumer behavior, especially among the digital natives. The paper examines why teens spend real money in virtual goods and services. We empirically investigate the reasons for virtual purchasing behavior in world's most popular social virtual world, Habbo Hotel. Using content analysis, we classify the reasons for purchasing into four higher order gratifications, namely elevated experience, hedonic and social factors as well as functional activities. The results demonstrate that virtual purchasing is a vehicle for enhancing and customizing the valued aspects in the user experience.*

**Keywords:** social commerce, purchasing behavior, uses & gratifications theory, virtual consumer behavior, virtual economy

## **1 Introduction**

Virtual worlds have become popular spaces for social interaction. As of July 2011, virtual worlds have received 1.4 billion registered users, 70% of which are between 5 and 15 years old. In addition to the growing usage rates, the importance of virtual worlds is also increasing from an economic perspective. The overall revenue of virtual worlds has been reported to be \$7 billion (Wasko et al., 2011). The total volume of the US virtual goods market was estimated to reach \$2 billion in 2011.

Purchasing behavior inside virtual worlds plays a pivotal role for the virtual world operators, especially since many virtual worlds do not apply access fees or periodical subscriptions. Instead, they generate revenue from selling virtual goods or property, and offering premium accounts with exclusive features and benefits for the users. For example, Habbo Hotel sold virtual goods worth €4.5 million to its young users in December 2010. Virtual world users trade their virtual possessions as well as share and discuss images and videos of the outfits and activities of their avatars on social media like YouTube or Renren, the Chinese equivalent of Facebook. Hence, it can be stated

that spending real money on purchasing virtual products and services is an emergent form of social commerce.

Virtual worlds can be classified into gaming worlds and social virtual worlds (SVWs) (Jung 2011). Unlike gaming worlds, SVWs do not have narrative goals or level-ups. The attraction of SVWs lies within the in-world social setting, i.e. interaction with other users in the 3D environment via customizable avatars while exploring the virtual environment. SVWs can facilitate in-world games but, in contrast to gaming worlds, gaming is not designed as a key component of the user experience. As a result, we define SVWs as persistent computer-mediated 3D environments, designed for social interaction and entertainment, where the users are represented by avatars (Bell 2008; Mäntymäki & Salo 2011).

The objective of the present study is to examine what factors predict purchasing behavior in social virtual worlds and to what extent purchasing is a means to elevate the user experience. Prior literature has examined the role of virtual experiences and the virtual environment, the perceived value of virtual items, and motivational factors as the constituents of virtual purchasing (Animesh et al. 2011). The perceived value of virtual items and those factors that are intrinsic to the purchasing process were found to affect decisions to purchase in virtual worlds (Guo & Barnes 2011). In addition, purchasing has been positioned as a subsequent behavior resulting from continuous service usage (Mäntymäki & Salo, 2011).

With regard to the second gap, research on virtual worlds has been contextually biased towards virtual worlds for adults, particularly Second Life (see e.g. Animesh et al. 2011; Goel et al. 2011; Nah et al. 2011; Shelton 2010) despite the fact that young people constitute the largest demographic group of virtual world users (Bell 2008; Wasko et al. 2011). Furthermore, today's youth, also referred to as 'digital natives' represent an interesting group since they have been exposed to various forms of information technology since their early childhood and actively engage themselves in online social networking (Palfrey & Gasser, 2008).

Thus, we empirically focus on Habbo Hotel, which has 243 million registered users and is the most popular virtual world for teenagers with 10 million unique visitors every month that come from 150 countries.

To fill in the gaps in the literature, this study takes a qualitative approach to investigate the reasons for purchasing behavior inside Habbo Hotel and employs the uses & gratifications theory to identify and classify the reasons for virtual purchasing behavior.

## **2 Social Virtual Worlds & Habbo Hotel**

Virtual worlds can be divided into Gaming Virtual Worlds and Social Virtual Worlds [11]. In contrast to GVWs, SVWs do not have explicit narratives or level-ups and have thus been referred to as multi-purpose information systems (Verhagen et al. 2011). Rather, they open up spaces in which the users define the purpose and content of the usage.

Habbo Hotel is the world's largest SVW with about ten times the number registered users as Second Life. Habbo Hotel is specifically targeted at teenagers; it has 10 million active users in 32 country-specific portals. According to Sulake Corporation, the Finnish platform provider, 90 % of the users are aged between 13 and 18.

Habbo Hotel is a 3D environment, which runs in a web browser environment. Upon first joining, a new user needs to create an avatar, which acts as the user's digital representation in the virtual space. This space "resembles a giant contemporary Western indoor space, presented in isometric 'retro style' three-dimensional graphics and populated by blocky avatars, each controlled by a user" (Lehdonvirta et al. 2009, 1065). Habbo avatars do not resemble human beings but are more like cartoon figures. The users are anonymous inside Habbo, revealing one's real identity of contact information is prohibited and moderated by the operator.

Habbo users cannot manipulate their surroundings but each avatar is provided with a virtual room that one can decorate with various pieces of furniture and invite other users into. Being in a room together, via their avatars the users can text-chat with each other. In addition, Habbo accommodates various non-violent games and organizes events such as celebrity visits. Habbo users can use real money to purchase virtual items and premium memberships that provides exclusive features, but Habbo does not apply access fees or periodical subscriptions, so use of the platform is free in general. Moreover, Habbo does not facilitate an in-world economy or a currency that could be exchanged to real money. In sum, the activities Habbo users can engage in relate to social interaction with other users, spending time in various ways, decorating and accessorising their rooms and avatars and trading their virtual possessions with other users inside the platform.

In contrast with the several studies investigating Second Life, Habbo has not received a similar level of attention. A search for Habbo using the ProQuest and EbscoHost databases, only returned three relevant academic publications. Griffiths and Light (2008) have investigated ethical implications of Habbo as a social platform for teenagers, while Lehdonvirta et al. (Lehdonvirta et al. 2009) used Habbo as a vehicle to investigate the nature of consumption of virtual goods. Finally, Iqbal et al. (2010) have undertaken a small-scale study among children in a Finnish school into the use of virtual world platforms, only one of which was Habbo. Mäntymäki & Salo (2011) investigated how the purchasing behaviour transcends from the continuous usage.

In addition to these studies, conference papers (Mäntymäki & Merikivi, 2010a; Mäntymäki & Merikivi, 2010b) have examined the drivers continuous user participation and argued purchasing being a key user behavior (Mäntymäki, 2009; Mäntymäki & Salo, 2010).

### **3 Virtual purchasing behaviour**

The unique characteristic of virtual goods and services (virtual items, characters, currencies, premium memberships) is that they do not have a clear atomistic equivalent or component in them (Fairfield 2005), and they can only be consumed and have value inside the virtual environment.

Lehdonvirta (2009) conceptually identified three classes of virtual item purchase drivers, namely functional drivers (game performance and advanced characters), hedonic (aesthetic appeal) and social drivers (visual appearance and rare collectibles) (Lehdonvirta 2009).

Shelton (2010) found that motivations for using Second Life correlated with purchasing of both virtual and real-life products. Guo & Barnes (2011) found that extrinsic motivators, like effort expectancy, performance expectancy and perceived value, as well

as intrinsic motivators, such as perceived enjoyment and the customization of the character, predicted the purchase intention in Second Life. In addition, the characteristics of the virtual environment have been found to play a role in predicting purchase decisions. Animesh et al. (2011) found social presence, flow and telepresence stemming from the virtual environment to be the key experiences determining the purchasing intention in Second Life.

To conclude, as there are a large number of other users present in SVWs, it seems plausible to assert that consumption is about building identity, experiences and status similar to real-life consumption habits.

In Habbo Hotel, users can buy various virtual items and services with Habbo credits. Virtual items can be used to accessorize the avatar, decorate one's virtual room or to be possessed as collectibles. Furthermore, the users can purchase a premium membership that provides exclusive features compared to the standard account which is free of charge.

The credits that in turn can be purchased with real money similarly than e.g. prepaid mobile subscriptions. In addition to money, one needs to have the user account. Thus, using the SVW temporally precedes purchasing and purchasing behavior.

## **4 Uses & gratifications theory**

We employ uses & gratifications (U & G) theory as the theoretical foundation to identify the perceived values underlying virtual purchasing and build the research model. U & G is a media use paradigm from mass communications research that focuses on individual use and choice of media (Katz et al. 1974). The main purpose of U & G approach is to explain the reasons why people choose a specific communication medium over alternatives and to elucidate the psychological needs that motivate people to use a particular medium.

U & G asserts that media use is goal-directed behavior aiming to full a core set of needs. Thus, rather than providing a set of predefined factors, U & G acknowledges that media usage is mainly determined by the functions it can serve. U & G has been employed to examine the use of internet, social networking sites and online games as well as virtual worlds (Cheung et al. 2011; Wu et al. 2010; Zhou et al. 2011).

In their study on the use of Second Life, Zhou et al. (2011) distinguished between functional, experiential and social values driving the user participation. With functional values Zhou et al. (2011) referred to usage driven by instrumental needs, i.e. to achieve or obtain something through the usage. Experiential values on the other hand relate to usage for its own sake e.g. pleasurable experiences and enjoyment derived from the usage. Thus, functional and experiential values can be viewed to reflect the extrinsic and intrinsic types of motivation (Davis et al. 1992). Finally, according to Zhou et al. social values in Second Life were obtained from interacting and forming relationship with other users.

In the present study, we do not use any predefined categories but first examine the most eminent reasons for purchasing behaviour in Habbo Hotel and therefore go deeper into the actual gratifications underlying these reasons.

## 5 Empirical research

The data was collected through an online survey published on the start page of the Finnish Habbo Hotel portal. Among other questions, the respondents were asked to answer the following open-ended question: why do you purchase Habbo items and/or premium memberships? Content analysis was used in classifying the responses (Krippendoff 2004). The codification of the empirical data was done by quantifying the reasons mentioned by the respondents. Each response was allowed to fall into several themes when applicable. In all, the codification can be classified data rather than theory-driven.

In total, the survey was opened 8928 times. 3265 respondents proceeded to the final page and submitted the survey. This yielded an effective response rate of 36.6 per cent. To offer the reader an overview of the profile of the respondents, the gender and age distributions are presented in Tables 1 and 2.

Gender	Frequency	Percent
Female	1860	57.0
Male	1347	41.3
Missing	58	1.8
Total	3265	100.0

**Table 1:** Gender distribution of the respondents

The majority of the respondents were females demonstrating that Habbo is able to generate content and activities that attract also the female audience. Table 2 illustrates the age of the respondents. As can be seen from Table 2, 12 and 13 are the most common ages among the respondents.

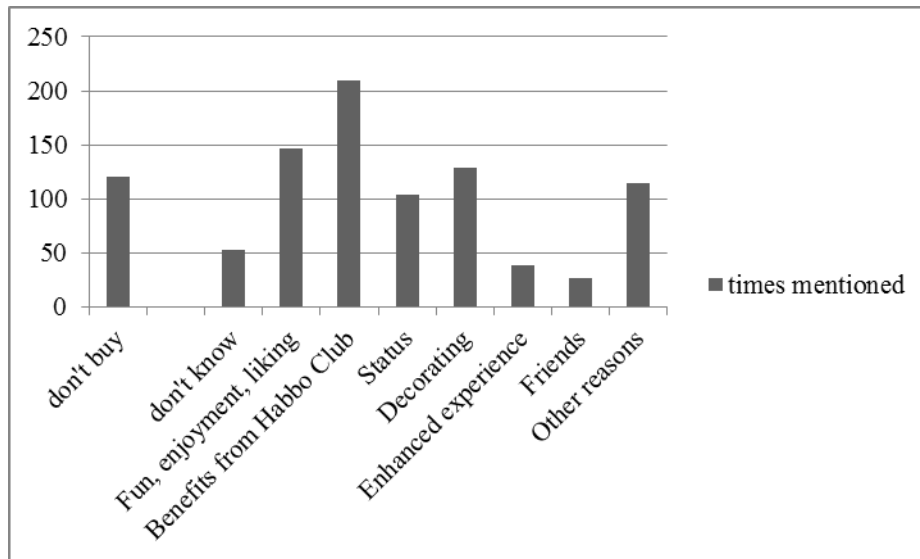
Age	Frequency	Percent
Missing	59	1.8
<10	98	3.0
10	260	8.0
11	504	15.4
12	611	18.7
13	600	18.4
14	438	13.4
15	292	8.9
16	154	4.7
17	71	2.2
18	68	2.1
>19	110	3.4
Total	3265	100.0

**Table 2:** Age distribution of the respondents

From the total pool of responses, a subsample of 1000 respondents was randomly selected to be included in the content analysis. After coding the responses based on the reasons mentioned, the analysis continued with counting the frequencies of different themes mentioned in the responses. As can be seen from Figure 1 presented below, the benefits from having a premium membership, Habbo Club was the most frequently mentioned reason for purchasing in Habbo. The second in terms of frequency was the fun, enjoyment or liking resulting from purchasing in Habbo. The third most frequently mentioned reason was decorating one's virtual room, i.e. the Habbo Home. The fourth

theme, labeled as ‘Status and self-expression’ captured the status as well as self-expression and differentiation from other users via possessing virtual items and/or the premium membership.

In addition to this top four, enhanced experience resulting from purchasing, obtaining more friends and trading were frequently mentioned. The category ‘other’ includes a wide range of less frequently mentioned reasons such as cyber-bullying and escapism. Moreover, a significant degree of the respondents explicitly addressed that they do not spend real money in their Habbo experience. Finally, many respondents were unable to articulate any reason for their purchasing behavior.



**Figure 1.** The most common reasons for purchasing in Habbo Hotel.

## 6 Gratifications from virtual purchasing in Habbo Hotel

### 6.1 Benefits from the premium membership

Having the premium membership provides exclusive features and benefits that are not available for the standard members such as special clothes, hairstyles and accessories as well as an extended maximum number of friends. The benefits from the premium membership are a means for obtaining something else than a goal itself. The value-added from Habbo Club can relate to enhanced status from being recognized as a club member, the wider selection of clothes and accessories as well as additional alternatives related to decorating one's room. Thus, the actual value of Habbo Club depends on the features the user appreciates the most and can be a combination of many factors that then relate to e.g. status, enjoyment, decorating or enhancing the overall user experience.

### 6.2 Decoration

Decorating one's virtual space i.e. room in Habbo was frequently mentioned as a reason for purchasing virtual items or the premium membership in Habbo. For decoration purposes, the premium membership offers exclusive room designs as well as complimentary furniture every month. Decorating the room was viewed as an

entertaining activity per se but also a way to express one's personality or status in Habbo's social scene. Finally some respondents viewed decorating important to create a nice and aesthetic environment to which invite friends or organize parties and games.

### **6.3 Trading**

Some respondents deliberately stated that they purchase virtual items to be traded with other users. This indicates that for the ones interested, trading constitutes an important part of the user experience. Similarly than decorating, trading was viewed both instrumental and a goal itself. Some respondents reported that they trade virtual items to 'become rich' in the virtual world whereas others viewed trading as an entertaining or exciting activity.

### **6.4 Fun, enjoyment and liking**

The enjoyment and fun experienced via virtual purchasing were often mentioned as the motives behind purchasing in Habbo. Some respondents reported having developed an affective relationship i.e. liking towards the items they have purchased and possessed. As an example, collectable items tend to have more emotional value than the 'regular' Habbo products. In addition to the enjoyment and personal liking, many respondents viewed purchasing as a mean to boost the enjoyment from Habbo.

### **6.5 Status & self-expression**

Having the premium membership and/or virtual possession was viewed as a status symbol and consequently, purchasing them as a vehicle for elevating one's status and gaining respect from other users. In addition to merely increasing one's status, virtual purchasing was used to differentiate from others, especially to make a distinction between the 'regular' users and the holders of the premium membership.

An interesting finding related to the status was that many respondents stated that users without the premium membership are discriminated in the social setting and purchasing the Habbo Club account can for some user be more a way to avoid discrimination than enhancing status. To sum up, virtual purchasing can be viewed rather as a vehicle for adjusting one's position in Habbo's social setting rather than simplistically enhancing status.

### **6.6 Enhanced user experience**

Purchasing was also viewed as a mechanism for making Habbo better in more general terms. Some respondents viewed this in a way that without purchasing the premium membership or virtual items the users experience is not good enough. The distinction between e.g. increased enjoyment or status is that the respondents did not specifically articulate the way purchasing enhances the experience, or focused on the overall experience.

### **6.7 Friends**

Obtaining more friends was viewed as a reason for purchasing. The respondents reported that 'rich' users and Habbo Club members were viewed more popular than the regular users. Thus, status is may be at least partially related to one's social circle.

Additionally, as an exclusive feature for the premium members, Habbo Club offers a more extensive ‘friend list’ i.e. allows the user to accept more people in his social circle as friends. Thus, especially people with extensive social network inside Habbo benefit from the premium membership, which then potentially further reinforces their popularity.

## **6.8 Other reasons**

The responses categorized under the theme ‘other reasons’ reflect the variety of motives for using Habbo as well as experiences derived from the usage. As a social virtual world, Habbo does not have narratives or goals, the user determine the actual purpose for their usage. Furthermore, as Habbo is targeted to basically all teenagers, the users are likely to be a heterogenic group in terms of their sociographic background and situations in real life. In sum, the wide range of different other factors driving purchasing was largely expected.

## **6.9 Classifying the drivers of purchasing**

Looking the findings through to the U & G lens we have divided the gratifications into four categories, labeled as elevated experience, hedonic factors, social factors and functional activities. Benefits from the premium membership and enhanced experience have been classified to fall into the elevated experience category whereas the hedonic factors category consists of enjoyment. The third category of gratifications was formed to capture the various social factors e.g. status, self-expression and making friends. The third category is formed of functional activities such as decorating one’s room and trading virtual items with other users. Table 3 summarizes the categorization of the gratifications.



Gratification	Theme	Quotation
Elevated experience	Benefits of the premium membership	“as a member you get access to interesting places” “to get the benefits from the Club memberships.” “because with them you get more friends” “then you can have more people as your friends”
	Enhanced experience	“Because it makes visiting Habbo and doing things there better” “...without stuff Habbo would be boring”
Hedonic factors	Enjoyment	“...then it is more fun to be in Habbo” “because of the fun of it” “...then everyone is having fun”
Social factors	Status	“they help to enhance status” “I want to be popular” “to gain respect”
	Self-expression	“to make my group noticed” “...you can better express yourself with clothing” “because the basic clothing does not tell much about one's personality”
	Making friends & socializing	“with stuff you can decorate your own room where you can chat and make friends” “...then it is nice to be in your room and spend time and chat with your friends” “Then you have more friends and you feel more like belong to the group.”
Functional activities	Decoration	“to decorate my room” “to make my room more comfortable”
	Trading	“to trade them with others” “to have something to trade”

**Table 3.** Classification of the gratifications from virtual purchasing behavior in Habbo Hotel

## 7 Discussion

### 7.1 Theoretical implications

The present study offers insight on the virtual consumer behavior among digital natives. The findings demonstrate that the fundamental reasons for virtual purchasing relate to enhancing and customizing the user experience. In other words, virtual items are not purchased to obtain something entirely new in the virtual world but to make the valued aspects in the existing user experience even better. In this regard the present study corroborates the notion that purchasing represents a subsequent step in the customer relationship following the usage (Mäntymäki & Salo 2011).

Since Habbo is primarily designed to be a recreational environment for teens and does not facilitate an in-world economy or educational institutions, the value derived from the usage is likely to be related to hedonic and social rather than utility in a conventional sense (cf. Davis et al. 1989). The central role of hedonic motives i.e. perceived enjoyment in driving sustained the sustained usage of Habbo has also been reported in prior literature (Merikivi & Mäntymäki, 2009; Mäntymäki, 2009; Mäntymäki & Merikivi, 2010a; Mäntymäki & Merikivi, 2010b). Hence, compared to Zhou et al. (2011) who distinguished between functional, experiential and social value from Second

Life usage, the gratifications related to purchasing behavior in Habbo concentrate more on experiential and social than functional factors. However, congruent with U & G, the results verified that purchasing behavior in Habbo is indeed goal-driven behavior.

The findings clearly reveal the existence of social hierarchies among users and their avatars and demonstrate how virtual purchasing is used to position oneself in the social setting and build virtual self-identity. However, as the users are not allowed to use their real names or reveal their identities inside Habbo, the status and prestige inside the virtual world do not fully transfer to 'real' world and vice versa.

Yet U & G has certain value in categorizing the reasons for virtual purchasing, there is there is a certain overlap between the three broad classes of gratifications that is described in the following quotation:

*"because it's so much fun, UC (you see) I like to trade stuff with others and people think you are more cool".*

From a theoretical perspective, the overlap can be explained by what Griffiths & Light (2008) meant Habbo being an example of convergence of social networking and digital gaming. This study takes the convergence perspective a step ahead by illustrating how profoundly the entertainment value of the SVW is dependent on the presence of other users and how e.g. trading virtual possession or becoming "rich" inside the virtual or other instrumental reasons can be the ones that actually drive the experiential gratifications.

## 7.2 Implications for business

Given that differentiating from "ordinary" users, gaining status and the exclusive benefits of the premium membership. This indicates that the service operator has been able to find to provide value-added that the users are willing to pay for. At the same time, however, the ordinary users i.e. the ones who do not pay money for the SVW usage are important for the premium users

Furthermore, the user experience should be attractive also without an immediate need for investing money. If the users without the premium membership or purchased virtual possessions start to feel like 'second class' users, they are likely to discontinue using the SVW. Furthermore, signaling status through the premium memberships and owning virtual items is more meaningful when there is a large number of people engaged in the platform. Several respondents described how the premium members are respected more but also how the premium members discriminate the ordinary users. *"Because without them (virtual items) Habbo would be nothing", "because so called 'average joes and janes' are being discriminated", "other people respect you more when you belong to Habbo club, ordinary user are discriminated", "because the others do not want to be friends with you unless you are a Habbo Club member or rich (own lots of virtual items)".*

These negative incentives may possess a risk for Habbo in the future if they alienate the regular users and give them an impression that all the fun inside the SVW is for the 'insiders'. Selling the premium accounts and value-added services requires that the basic service is able to attract and retain an extensive set of users of whom some can be converted into customers who invest real money in their usage. The success of this business model is hence dependent on retaining the basic users active. As a result, the operators need to carefully balance the benefits gained through purchasing while

maintaining the service attractive also the ones who either can or do not want to invest money in their usage

### **7.3 Limitations and future research avenues**

In the present study, we focused on the users of the Finnish Habbo portal. Thus, as a first area of further research additional studies should examine to what extent the findings hold in other context, including the national culture but also the culture of the Habbo portal. In a similar vein, replicating the study in another Habbo portal and/or in another SVW would provide information about the purchasing behavior in other virtual worlds.

Second, given the fact that in Habbo social networking and gaming converge, also the reasons for participation and consequently purchasing are various and highly interrelated, as the results illustrate. Hence, to better understand the user's motivation a hierarchical approach to investigate the reasons could be appropriate to understand the mutual relationships and the importance of different motivational factors. Additionally, scrutinizing the relationships and hierarchies between the motivations would also help to better understand the very existence of SVW, i.e. are they in essence social, hedonic or functional platforms.

Third, an important further research avenue would be to examine e.g. psychological, contextual and situational triggers of purchasing behavior in the SVW setting. From a psychological standpoint, understanding how behavioral intentions become activated has been addressed to be a central shortcoming of many prominent theories within social psychology (Bagozzi & Dholakia 2006; Bagozzi 2007). Understanding the factors that act as triggers virtual purchasing would thence be theoretically insightful but also managerially highly relevant.

Fourth, as argued earlier, purchasing can be viewed as subsequent step following continuous usage in the SVW customer relationship. However, there is likely a reciprocal loop between continuous usage and purchasing since the financial commitment in the SVW experience is likely to further reinforce the willingness to participate in the SVW to materialize the returns on the investment. As a result, further research examining the mutual relationships between participation and purchasing behavior and their development would be highly appropriate.

Fifth and finally, active participation in SVWs includes more behaviors than the usage and purchasing. As an example, the Habbo users act as tutors for novices, contribute to the various Habbo fansites and share their experiences in social media. Thus, the argument Kim & Son (2009) that the post-adoption behavior should be viewed more broadly encompassing other behaviors than usage is very valid also with research on SVW.

## References

- Animesh, A., Pinsonneault, A., Sung-Byung Yang, & Oh, W., (2011): An odyssey into virtual worlds: Exploring the impacts of technological and spatial environments on intention to purchase virtual products, *MIS Quarterly*, Vol. 35, No. 3, pp. 789-810.
- Bagozzi, R. P., (2007): The legacy of the technology acceptance model and a proposal for a paradigm shift, *Journal of the Association for Information Systems*, Vol. 8, No. 4, pp. 244-254.
- Bagozzi, R. P., Dholakia, U. M., (2006): Antecedents and purchase consequences of customer participation in small group brand communities, *International Journal of Research in Marketing*, Vol. 23, No. 1, pp. 45-61.
- Bell, M. W., (2008): Toward a definition of “virtual worlds”, *Journal of Virtual Worlds Research*, Vol. 1, No. 1,.
- Cheung, C. M. K., Chiu, P., & Lee, M. K. O., (2011): Online social networks: Why do students use facebook? *Computers in Human Behavior*, Vol. 27, No. 6, pp. 2322-2339.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R., (1989): User acceptance of computer technology: A comparison of two theoretical models, *Management Science*, Vol. 35, No. 8, pp. 982-1003.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R., (1992): Extrinsic and intrinsic motivation to use computers in workplace, *Journal of Applied Social Psychology*, Vol. 22, No. 14, pp. 1111-1132.
- Fairfield, J., (2005): Virtual property, *Boston University Law Review*, Vol. 85, pp. 1047-1102.
- Goel, L., Johnson, N. A., Junglas, I., & Ives, B., (2011): From space to place: Predicting users' intentions to return to virtual worlds, *MIS Quarterly*, Vol. 35, No. 3, pp. 749-771.
- Griffiths, M., Light, B., (2008): Social networking and digital gaming media convergence: Classification and its consequences for appropriation, *Information Systems Frontiers*, Vol. 10, No. 4, pp. 447-459.
- Guo, Y., Barnes, S., (2011): Purchase behavior in virtual worlds: An empirical investigation in second life, *Information & Management*, Vol. 48, No. 7, pp. 303-312.
- Iqbal, A., Kankaanranta, M., & Neittaanmäki, P., (2010): Experiences and motivations of the young for participation in virtual worlds, *Procedia - Social and Behavioral Sciences*, Vol. 2, No. 2, pp. 3190-3197.
- Jung, Y., (2011): Understanding the role of sense of presence and perceived autonomy in users' continued use of social virtual worlds, *Journal of Computer-Mediated Communication*, Vol. 16, No. 4, pp. 492-510.
- Katz, E., Blumler, J. G., & Gurevitch, M. 1974. Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Ed.), *The use of mass*

- Iqbal, A., Kankaanranta, M., & Neittaanmäki, P., (2010): Experiences and motivations of the young for participation in virtual worlds, *Procedia - Social and Behavioral Sciences*, Vol. 2, No. 2, pp. 3190-3197.
- Jung, Y., (2011): Understanding the role of sense of presence and perceived autonomy in users' continued use of social virtual worlds, *Journal of Computer-Mediated Communication*, Vol. 16, No. 4, pp. 492-510.
- Katz, E., Blumler, J. G., & Gurevitch, M. 1974. Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Ed.), *The use of mass communications: Current perspectives on gratifications research*. Beverly Hills, CA: Sage.
- Kim, S. S., Son, J., (2009): Out of dedication or constraint? a dual model of post-adoption phenomena and its empirical test in the context of online services, *MIS Quarterly*, Vol. 33, No. 1, pp. 49-70.
- Krippendorff, K., (2004): "Content analysis: An introduction to its methodology, 2nd edition," Sage, Thousand Oaks.
- Lehdonvirta, V., (2009): Virtual item sales as a revenue model: Identifying attributes that drive purchase decisions, *Electronic Commerce Research*, Vol. 9, No. 1-2, pp. 97-113.
- Lehdonvirta, V., Wilska, T., & Johnson, M., (2009): Virtual consumerism, *Information, Communication & Society*, Vol. 12, No. 7, pp. 1059-1079.
- Mäntymäki, M. 2009: *Customer loyalty in social virtual worlds*. In Proceedings of the 22nd Bled eConference eEnablement: Facilitating an Open, Effective and Representative eSociety, Bled, Slovenia.
- Mäntymäki, M., & Merikivi, J. 2010a. *Investigating the drivers of the continuous use of social virtual worlds*, In Proceedings of the 43rd Hawaii Conference on System Sciences, Koloa, Kauai, Hawaii.
- Mäntymäki, M., & Merikivi, J. 2010b. *Uncovering the motives for the continuous use of social virtual worlds*. In Proceedings of the 18th European Conference of Information Systems (ECIS 2010), Pretoria, South Africa.
- Mäntymäki, M., & Salo, J. 2010. *Trust, social presence and customer loyalty in social virtual worlds*. In Proceedings of the 23rd Bled eConference eTrust: Implications for the Individual, Enterprises and Society, Bled, Slovenia.
- Mäntymäki, M., Salo, J., (2011): Teenagers in social virtual worlds: Continuous use and purchasing behavior in Habbo Hotel, *Computers in Human Behavior*, Vol. 27, No. 6, pp. 2088-2097.

- Merikivi, J., & Mäntymäki, M. 2009. *Explaining the continuous use of social virtual worlds: An applied theory of planned behavior approach*. Paper presented at Proceedings of the 42nd Hawaii Conference on System Sciences, Waikoloa, Big Island, Hawaii.
- Nah, F. F., Eschenbrenner, B., & DeWester, D., (2011): Enhancing brand equity through flow and telepresence: A comparison of 2d and 3d virtual worlds, *MIS Quarterly*, Vol. 35, No. 3, pp. 731-A19.
- Palfrey, J., Gasser, U., (2008): "Born digital: Understanding the first generation of digital natives," Basic Books, New York, NY.
- Shelton, A. K., (2010): Defining the lines between virtual and real world purchases: Second life sells, but who's buying? *Computers in Human Behavior*, Vol. 26, No. 6, pp. 1223-1227.
- Verhagen, T., Feldberg, F., van den Hooff, B., Meents, S., & Merikivi, J., (2011): Satisfaction with virtual worlds: An integrated model of experiential value, *Information & Management*, Vol. 48, No. 6, pp. 201-207.
- Wasko, M., Teigland, R., Leidner, D., & Jarvenpaa, S., (2011): Stepping into the internet: New ventures in virtual worlds, *MIS Quarterly*, Vol. 35, No. 3, pp. 645-652.
- Wu, J., Wang, S., & Tsai, H., (2010): Falling in love with online games: The uses and gratifications perspective, *Computers in Human Behavior*, Vol. 26, No. 6, pp. 1862-1871.
- Zhou, Z., Jin, X., Vogel, D. R., Fang, Y., & Chen, X., (2011): Individual motivations and demographic differences in social virtual world uses: An exploratory investigation in second life, *International Journal of Information Management*, Vol. 31, No. 3, pp. 261-271.