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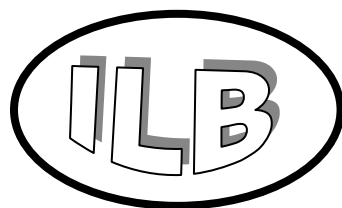
Virtual Consumption but Real Market
Does your avatar eat or drink on Second Life?

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Introduction

Second Life® (SL) is an innovative digital world created in June 2003 by Linden Lab, a Californian company, acting only on the Internet. The purpose of SL is to provide entertainment via virtual experiences to customers who act, travel, buy and discuss into this world through their own avatar. SL is a 3D interactive combination of improved chat and video game, without any strict rules nor clear objective for the game apart to spent time in virtual reality and to enjoy this experience. SL is the most important Massive Multiplayer Online Role Playing Game (MMORPG).

Keywords: *Digital world, Virtual consumption, Global branding, Food- related consumer behaviour*

Importance and interest

In January 2009, SL counts 16.8 million residents living all over the world. The rate of attrition is estimated 90% Consequently the active residents are 1.4 million and the average number of logged-in is 522,000 per week, with peaks of 80,000 logged in the same time. However, due to technical limitation, the maximum number of avatars that (who?) can meet in the same time at the same place is 70. According to new trends of Web practices, SL is a flat network, without any visible hierarchy and permanent self-regulation. Most activities are paid via Linden $, which value is 266 L$ for 1 USD (1 EUR = 345 L$). Not surprisingly, avatars pay for wearing virtual clothes or shoes, mostly fashionable, driving virtual cars, mostly BMW or Mercedes rather than Tata. They sometimes also pay for attendance to a virtual concert, to visit an art gallery, read a book or have virtual dinner in restaurant.

Table 1. Second Life Economic Indicators, L$: Linden Dollar

per month	Use Million hours	Land Million m2	Transactions Million L$	Change Million USD	Premium accounts	Exchange rate L$ to one USD
nov-05	1.7		L$ 731.2	$349	11 633	L$ 255.3
nov-06	7.0	255	L$ 3427.8	$2 627	42 430	L$ 273.2
nov-07	24.6	939	L$ 5869.0	$7 273	92 595	L$ 268.4
nov-08	36.8	1 871	L$ 8777.5	$8 616	79 721	L$ 265.7

In SL, prices are far lower than those in RL, encouraging virtual consumption of everything. Turnover of Linden Lab is not disclosed, it is said to be more than 20 million USD for 250 employees, including 150 computing engineers. According to the most recent economic report on SL, the annual real turnover behind the exchanges between avatars is 400 million USD. Monthly change for user-to-user transactions was 8.6 Million USD in November 2008. During the same month, users' connection was 36.7 Million hours with a yearly 15% increase. USA

count for 39.4% and EU for more than 35.7% (Ge, UK, Fr, NL, It, Sp and other) for connection time. Users of 25-34 years old represent 34.5% of connection hours and 35-44 28.5%, 45 plus are 21.1% (Linden Lab, 2008). SL users are 58.7% male. SL is not yet a videogame for adolescents, nor capitalism at play (Ondrejka, 2005).

Daily turnover is currently 287,000 USD in January 2009. Around 80 000 residents are earning real money from their avatar, and few became real millionaire recently. The management of intellectual property rights of created businesses is one of the main regulation activities of SL master. RL turnover generated by European avatars is liable to VAT since 2007 and US Government is planning to apply same rule for US turnover. E-commerce is buoyant on SL, complying now with E-Commerce Directive from EU and US Digital Millennium Copyright Act (Davidson, 2008). E-commerce of virtual objects is rather developed in SL, including auctions. The land of SL is composed of several islands, belonging to various companies acting in RL, such as Amazon, Areva, Auchan, BMW, Budweiser, CBS, Crowne Plaza, DELL, Dior, Evian, HP, Lacoste, Nike, l'Oréal, Orange, Peugeot, Philips, Randstad, Samsung, Verizon. Land marketing is the main source of income for SL's owner. SL counts virtual real estates with 1645 islands and 226 main lands. Sweden, Estonia, Macedonia and Maldives have opened their own virtual Embassy on SL in 2007. In March 2008, Orange bought four islands for 5,000 USD.

SL also includes virtual media, providing virtual news and real advertising. Most of ads are given through sponsoring of diverse events such as virtual concerts, conferences, parties, and exhibitions. Flat replications of RL ads do not provide high unaided recall within the panel of avatars surveyed by marketing agencies, some also use focus group meetings with avatars in order to measure advertising efficiency and brand notoriety on SL. Virtual brands, not existing in RL, are expected soon but don't appear yet in SL. Banking and gambling are forbidden on SL. Although not benefiting from economies of scale, big corporations find low cost basis for brand advertising and loyalty in RL (Siklos, 2006). As a matter of fact, IPRs on digital creations are more subject to dispute than brand ownership in virtual worlds (Gensollen, 2007).

The famous music band U2 did a virtual performance on SL on April 2006, with fake Bono and avatars of other members of the band. The movie of this virtual concert is still a success on YouTube. Jean-Paul Gaultier Perfumes launched its new "Fleur de Mâle" on SL first in March 2007, which was challenging, as promoting a perfume on the Web without any aroma diffusion is quite surprising, but was a success. The new perfume was expected in real market prior its launching and the sales in RL were immediately high in April 2007, compared with usual launching campaigns. The company's island, so-called Belladone, was used by the commercial staff for virtual meetings with avatars of sellers from all over the world in order to give them the opportunity to exchange and to learn how to promote "Fleur de Mâle" in a more efficient way. Tourism agencies are also present on SL; so-called «green territories» such as Maldives, Midi-Pyrénées or Cantal give most of virtual tourism opportunities. Your avatar can flight from one island to another through virtual Brussel Airlines on SL. Whereas AirFrance-KLM created in November 2008 an island in the sky where shareholders can meet, share information and get updates from the latest financial news from the Group. Thalys Train Company offers a tele-portation station with friendly assistant avatars.

In June 2008, ArcelorMittal hold a virtual general assembly of shareholders with virtual PowerPoint presentations of RL annual report and strategy of the group, and interview of virtual CEO as well. This meeting was open to potential shareholders, investors and journalists. 70 avatars did follow this virtual meeting. It is worth noting that several recruitment agencies are acting on SL for exchange and interviews with avatars in order to detect interesting profiles and skills to hire for RL.

Private effects of SL activity on RL are sometimes surprising. Some residents get married and even have children in SL. In September 2008, it was reported that a Japanese woman did stay in real jail after killing the avatar of her husband. The Law protects digital art as goods in Japan. In November 2008, a British woman, 30 years old, divorced, arguing that her husband was spending more time with female avatars for virtual sex than with her in RL <u>and</u> in SL.

New trends of SL usage are e-psychotherapy and e learning. The first one is a kind of modern use of puppet, which is as old as psychotherapy (Virole, 2008; Tisseron, 2008). The last one is a new form of distant-learning, improved through the voice recent functionality of SL. A mix of the two is likely to be used in order to give back interest for learning to young adolescents addicted to video games and not often present at school. Online Universities count for 15% of corporate businesses in SL. Private companies also use E-learning in SL towards their own employees or clients (Hemp, 2008). According to the profile of residents, hiring agencies are active in SL, not only for virtual jobs.

Material and method

The purpose of the present paper is to explore the capability of virtual consumption to promote and support food-related activities. As exploring virtual worlds needs quite innovative method, involving a huge amount of time and money, the article only focuses on primary stage of exploration, waiting for adequate resources devoted to research on virtual consumption. Hence, this exploratory survey is based on literature review, which is more web-oriented than led by academics. Then the study will present some recent facts about SL, as an illustration of range and limits of virtual consumption with respect to food.

Strangely, avatars sparsely enjoy food on SL. When browsing on SL with "food" as keyword, 172 businesses are identified; more appear when typing "wine" or "beverage". Most of them are restaurants, bars and ballrooms, where the opportunity to meet avatars is more appealing than getting food or drink items *per se*. Some places are food stores and supermarkets and the remaining category is kitchen stores where meeting other avatars gives the opportunity to discuss about food diet and nutrition, and to get recipes as well. There is one Food Island and one Kitchen corner as places dedicated to food, but most restaurants and bars are spread-out in various islands not necessarily dealing with food, as in RL.

Kraft has opened its Phil's Supermarket in May 2008. The store displays more than 70 new food and beverage virtual items with various brands in health and wellness, snacking, quick meals, and premium items such as pizza, pastas, barbecue sauce, cheese, iced tea and organic cereals. These new products were launched later on real market (businesswire.com, 2007). Other brands are also offering food items on SL, such as Nabisco or Nestlé. In almost all cases, full labelling includes nutritional facts. Shoppers are able to personalize product lists, recipes and nutritional profiles and can receive RL world coupons.

On Food Island, the market place gives the opportunity to shoppers to express their feedback on both the store and the products, through focus group and forum open space, which are used in RL at improving Kraft's marketing activity.

The first restaurants were open since the beginning of SL in June 2003. The cards offer to the guests the following items such as virtual *duck & mushroom ravioli*, virtual *grilled lamb over couscous*, and virtual *Hungarian chocolate mousse*. The ambiance is often cosy and select, and the restaurants are sometimes full, it is cautious to make reservation 24 hours prior coming. Frequenting bars is less formal.

Sponsoring events such as concert, art exhibition or game is another way, very usual, to promote brand. However, SL interactive milieu needs to make animation and appealing activities at the brand's stand. Nesquik Bunny avatar interacts with other avatars, sometimes by acting as a DJ, and more often by offering branded Nesquik objects including T-shirts, bottles, sweatshirts and skateboards (Salvo, 2007).

A nice food-related island is 7 Days Magic Bakery, which is a chain of shops selling pastries, mostly in Eastern Europe in RL. 7 Days belongs to Vivartia Company located into 30 countries all over the world. As selling sweetened cookies and croissants is mainly based on olfactory dimension, the appeal of 7 Days Magic Bakery island in SL is based on funny interactive experience of visual visit of the factory, with a fine design of all characters and scenery. Any avatar can process his/her own chocolate virtual pastry and decide the recipe. The whole experience includes to process pasta, choose aroma, colour, shape and effect on avatar as well. The effect on avatar is very simple: instantaneously rolling or jumping, none long run effect such as body fattening, chocolate addiction nor enhanced self-control thanks to serotonin intake is possible.

The most important behavioural survey carried-out in SL was published in 2007 (Ortiz de Gortari, 2007). 657 online SL users took part to the survey via a dedicated website. Most SL users have experienced a sense of losing track of time (from always to sometimes 75.0%), as well experiencing trance state (79%), and emotional reactions to other avatars (57.8%). Interestingly, it was reported that the most common conflict with RL activities as a consequence of using SL was sleeping, bathing or eating less, in order to spend more time in SL (always to sometimes 25.3%). It was noticed that, because of the anonymity, SL affords its residents; most of them tend to be even more socially active than they are in RL (Davidson, 2008).

Directly present, strong brands related to food exist on SL. Builders of businesses and places to visit or explore use RL brands in order to make their creation more realistic. Hence one can find branded food items displayed on tables, shelves or cards. Street and video ads are also related to strong brands. IslamOnline.net has opened a Ramadan tent on SL since second year in September 2008, which is, in some extent, related to food behaviour.

Results and discussion

A brief travel into Second Life® clearly shows that the line between virtual and real worlds is blurring (Hemp, 2006). The virtual world is led by appearance. One can customize the look of his/her avatar, but not the nature or personality. However, SL is a *bal masqué*, offering the freedom to remain unanimous for individuals, not for firms. According to Baudrillard, it is worth considering that appearance, imitation and simulation are nowadays a dominating trend preceding reality in our society (Baudrillard, 1981). Hence experiential marketing, selling dream, should be better considered, instead of selling simple concrete attributes.

In SL status is demonstrated through ownership of items with meticulously programmed designs, textures and animations (Lin, 2008). Such items, which residents can either purchase from other ones or create themselves, have attained status value because they require creativity and effort to produce. Grunge clothing, for instance, is a status symbol because ripped and stained clothing is difficult to replicate digitally. Beyond the disinhibiting feature of avatar, which allows lowering the daunting barriers of RL, SL provides opportunity to a new sense of adventure without any risk.

The exploration of several islands in SL demonstrates that the ambience seems rather boring with clean scenery, despite the random move of walking avatars, birds and other small animals. Seeing and hearing are always used by avatars. Sounds such as music, wind, rain, steps are welcome. But taste, touch and smell are hopelessly missing. SL is bacteria-free, sugar-free, salt-free, fat-free, cholesterol-free, moisture-free and so on. It is obviously also pleasure-free when virtually eating food or drinking beverage. Drinking beverage has some effect on the avatar such

as trouble seeing or drunkenness related to alcohol. But that's a pity not to be able to appreciate, as avatar, the complex taste of one glass of wine. As food is a world of full five senses, this absence is a challenging handicap for food and beverage promotion on SL.

As the spread of virtual worlds will increase in near future, the need of presence of food related brands on SL or equivalent is not questionable. The main issue is how to make food items better appealing on SL? This means that food presence might pass over virtual reality to offer avatars some immediate benefits linked to virtual consumption such as more energy, better attractiveness for avatar, improved shape of avatar's body or enhanced perception of his/her environment. Nike is selling shoes on SL, which give avatars capability to jump higher.

Basically these effects are psychotropic attributes of food and beverage. They might be included in SL software driving avatars' behaviour. Another possibility might be to turn on sustainable consumption by promoting food miles or environment friendly content of food items. However, this is more addressing towards citizens' expectations rather than consumers' ones.

It is worth to consider that shopping for RL goods in a virtual world on SL may contrasts to today's solitary experience of online shopping and may become an appealing shopping experience (Lin, 2007). Furthermore this author considers SL as a greener than other social activities, by calculating the carbon footprint of virtual consumption, including the use of a RL computer[1]. However, the author concludes that risk exists that SL users might develop a false sense that natural resources are unlimited.

This rapid overview of SL indicates that some assumptions raise and need to be checked:

- By using only vision and hearing, two up to five senses, SL hampers food-related experience and limits it to sole visual identification of brands,
- Avatars are never hungry, they are not looking for food but for meeting opportunities,
- On intangible market, SL's avatars do not feel concrete advantages and benefits linked to food, such as satiety, energy, hedonic pleasure, native tangs experience or euphoria,
- The target of advertisings in RL, from food-related strong brands, is not including most of consumers behind the SL's avatars, in other words: Is SL a good market for food advertising?
- As there is no personal risk in virtual world, there is no need of "food as safe sex". It is interesting to note that virtual sex-related activities are more important and generate more turnover than food-related ones in SL. It may be worthwhile to develop the aphrodisiac effects of some virtual food items on avatars. However this will not be possible for usual brands with families as main target.

Measuring the appropriateness of such assumptions obviously needs deeper investigations. Albeit exploratory, the present study hopefully helped at raising key concerns and useful routes for near future of agro-food companies in a global and likely virtual world but concrete market.

Managerial considerations and conclusion

Managerial considerations towards agri-food industry might be twofold with respect to virtual worlds: i) future of virtual food, ii) business model improvements.

Concerns rise about the future food market share among other markets when the trend goes to virtual items. The question is not how to compete between agri-food companies but how to compete between food expenditures and virtual ones. A better understanding of pleasure related to food intake must be seriously considered, which is likely to be far from functional food or either

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1.   cloud computing might be challenging for the carbon footprint calculation of computer-based activities.

simple fooding.

Other matter of concern is that when residents are under hypnosis in front of their screen, they are prone to loose their bearings on both time and space scales. Hence the status of food might be under-considered by users in order to keep connected. Basically this may lead to more frequent and speed feeding behaviour rather than enjoy and share pleasure and company for a dinner or even a lunch. Binge eating might be a kind of side effect of hypnosis on virtual worlds. On the business side, there is an obvious need of adaptation of classic marketing tools in order to survey Second Life markets. Analysis of brands experience pointed-out that when brands use simple, flat showroom, few avatars come and visit the given island. Whereas, when brands design an interactive showroom, offering possible customization of products displayed for trial, avatars are keen to visit and stay into the showroom. They are more prone to try or to buy the promoted virtual innovative products (Abiven, 2008). For instance, Peugeot get success by selling its concept car 308 RC Z for 600 L$ (SLBusinessreview.com, 2009). So far, the factor of success is unknown: concept car or low price?

One main constant business attitude in SL is that firms come easily, and quit very quickly. As the investment is low for buying an island, lot of opening businesses are quite often communicated, while leaving SL is not a positive announcement for the firm, or SL manager or communication agencies dealing with SL. Several business locations quoted on web media in 2007 or 2008 are not still existing in early 2009. No data is available on that purpose on SL economy monitoring website (SLBusinessreview.com, 2009).

Table 2. Intensity of business according to time spent on SL, L$ Linden Dollar

per month	Transactions /hour L$	Transactions /m2 L$	Transactions /premium account 1000 L$
nov-05	427		63
nov-06	491	13.46	81
nov-07	238	6.25	63
nov-08	238	4.69	110

As usually in any new market, SL business is now at a plateau stage, where users experience more their consumer behaviour, once became familiar with this virtual world. On the business side, merging trend is coming now, with more professional actors, not only big companies, some left SL rapidly. Reliable businesses in SL are those who base their activity on offering leisure and pleasant experience, beyond virtual items sold. This is challenging for food industry, but worth to consider.

Further developments of this study need deeper investigation in order to collect original data. This will be also challenging for marketing science, as the use of virtual panel of avatars or avatars survey is an innovative protocol still to be implemented.

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