# *A Review on how the Metaverse evolves the Retailing sector*

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## *1. Abstract:*

This article looks at how retailing has changed over time, from brick & mortars then electronic to metaverse retailing, and how metaverses have influenced that evolution. Retailers could operate in three different yet intertwined places at the same instance; therefore, the spatial component is taken into account. We emphasize the important obstacles and opportunities encountered by traditional shops, e-merchants, and metaverse retailers, with a special focus on essential promotional factors. The writers examine “Second Life” in order to understand the metaverse phenomenon, and they come up with a variety of conclusions. One major result is that while developing promotional plans, businesses must take a comprehensive and broad strategy, especially if they want to engage in the metaverse.

## *2. Introduction:*

Both at the international and national level, the business climate has been undergoing major changes. Two key processes have fueled these transformations. On the one hand, it has been observed that the economy has shifted from an industrial to an info-based economy, as evidenced by the meaningful and ever-expanding data generating elements of our goods, services, and manufacturing, as well as the percentage of the workforce that now indulges in informational activities rather than physical. The intangible aspect of the economy, often known as intelligence has become the most significant resource for all companies, including public sector organizations, in terms of efficiency and competitiveness.

On the other hand, the phenomena which we know as 'ICTs revolution' continues to accelerate, providing the masses with ever-more powerful, virtually versatile, accessible, and most importantly affordable instruments whose main goal is the management of 'information'—basically data manipulation and handling. This combination is extraordinarily potent, not only because of the fact the world economy's most valuable resource has shifted to 'knowledge,' but also because we are now in possession of increasingly sophisticated instruments that can operate on data, in ways that were previously impossible or unfathomable. As a result, for this to survive and grow in the coming days, major and small businesses may, should, and must do things differently. This necessitates a new breed of organizational & managerial ideas, which will have far-reaching repercussions across all sectors of the society especially the industries. Such theories have to cope with two operations up to now: the physical 'offline' one and the internet one. Even in the digital era, this is true since the world's institutional and legal frameworks are still mainly

focused on geography. New technologies, on the other hand, have enabled the creation of new virtual places and habitats, known as metaverses, in which socioeconomic interactions can take part.

In this study, we look at how expanding and expanding the accessible places for individuals and organizations to work in via metaverses (online virtual worlds) affects product and service marketing, and more particularly, the impact they can have on electronic retailing. Key components of promotion and advertising, as well as the obstacles and possibilities in retailing, will be highlighted. The study begins by examining the shift from conventional retailing to the currently on rise method of electronic retailing (e-retailing), and subsequently to metaverse retailing. Without going any further, we must go over some crucial background information on metaverses and their evolution.

### *3. Living in multiple-spaces: the new business environment:*

Telephones, computer networks, the Internet, and mobile phones have substantially transformed our economic and social environments, allowing the emergence of an electronic space that is inextricably linked to the actual space and location of our physical world [2]. Since the mid-1990s, the fast expansion of e-commerce and e-business, as well as the way we live, work, interact, study, and play, has represented the manifestation of the entwined 'two spaces'—the physical and electronic spaces. The emergence of the electronic space spawned a slew of new operations commonly titled as e-commerce, e-business, e-government, and e-learning, now these developments necessitated the development of a new breed of organizational and managerial theory, as evidenced by the use of the 'e' prefix to distinguish these new operations occurring in the realm of electronics, as shown in Table 1. The table should be expanded further, according to Papagiannidis et al. [3], by adding the prefix 'meta,' which stands for metaverse. Metaverses are virtual worlds that add new dimensions and domains to our physical reality for economic, social, and recreational activities. Synthetic worlds is a term that emphasizes the idea that these worlds are the result of human activity.

**Table 1** Extending the traditional taxonomy by adding the 'meta' dimension. Adopted from Papagiannidis *et al*. [3]

| | Real | Electronic | Meta |
|---|---|---|---|
| Real | $B_r2B_r$ | $B_r2B_e$ | $B_r2B_m$ |
| Electronic | $B_e2B_r$ | $B_e2B_e$ | $B_e2B_m$ |
| Meta | $B_m2B_r$ | $B_m2B_e$ | $B_m2B_m$ |

Almost all metaverses began in the gaming sphere, which were commonly known as "massively multiplayer online role play games (MMORPGs)", but quickly expanded into alternate worlds, expanding our physical and electronic environments in the process. As the exponential growth in

the total count of individuals spending considerable time in the so-called metaverses was evident, a new social and commercial environment has evolved, including not only physical and electronic locations, but also numerous virtual spaces. Here, the socio-economic cross-over between the virtual, electronic, and physical worlds grow more significant as the economic and social contacts between the players of these games and both in-world and real-world physical and e-businesses rise.

These advances are resulting in the emergence of a multi-paced corporate environment that is significantly more complicated than what people are accustomed to. Metaverses are already a burgeoning field of study that has piqued the curiosity of academics from a variety of fields. The Studies involving the psychological, economic, marketing, business & also advertising, legal studies, industry-specific research, such as in the music industry, and studies on the evolution of metaverses and their features are just a few examples.

The virtual world market is believed to be worth a billion dollars, with the majority of revenue coming from the subscriptions that users must pay to play MMORPGs, which are primarily themed worlds that allows the willful acceptance of roles and acts that player must do, while there are some worlds that enable free-style role playing. World of Warcraft, EverQuest, EveOnline, Star Wars Galaxies, and Second Life are all instances of metaverses. In this article, we will utilize Second Life, a continuous and permanent environment that was created to give users power over practically every element of their lives in order to promote their imagination and artistic vision, resulting in a vibrant & dynamic world full of intriguing material.

**Table 2** Estimating the number of Second Life business owners using Positive Monthly Linden Dollar Flow (PMLF)

| USD Equivalent PMLF | 12/07 | 01/08 | 02/08 | 03/08 | 04/08 | 05/08 | 06/08 | 07/08 |
|---|---|---|---|---|---|---|---|---|
| < $10 USD | 26,922 | 28,711 | 28,896 | 31,082 | 29,598 | 31,142 | 30,657 | 32,826 |
| $10 to $50 USD | 14,618 | 16,417 | 16,212 | 16,566 | 16,999 | 17,383 | 16,889 | 17,673 |
| $50 to $100 USD | 3,156 | 3,740 | 3,465 | 3,754 | 3,642 | 3,725 | 3,594 | 3,792 |
| $100 to $200 USD | 2,237 | 2,436 | 2,357 | 2,389 | 2,493 | 2,468 | 2,419 | 2,452 |
| $200 to $500 USD | 1,971 | 2,115 | 1,981 | 2,093 | 2,191 | 2,282 | 2,173 | 2,284 |
| $500 to $1,000 USD | 830 | 863 | 861 | 935 | 961 | 955 | 979 | 943 |
| $1,000 to $2,000 USD | 462 | 464 | 513 | 537 | 515 | 558 | 556 | 573 |
| $2,000 to $5,000 USD | 324 | 333 | 307 | 367 | 358 | 378 | 366 | 391 |
| > $5,000 USD | 158 | 156 | 155 | 165 | 173 | 189 | 188 | 202 |
| Total Unique Users with PMLF | **50,678** | **55,235** | **54,747** | **57,888** | **56,930** | **59,080** | **57,821** | **61,136** |

*Source: Second Life economic statistics* [20]

Second Life was chosen because it allows users to design items from the ground up, rather than relying on limited amount of resources that are usually generated by the metaverse's developers. Generation of any content by users is owned by the users, who have the right to commercially utilize it. The creators of Second Life, Linden Labs, run an in-world economy centered on the Linden Dollar, which is used to conduct all transactions. Linden Dollars may be traded for actual money, allowing content producers to profit not only in Second Life, but also outside. Because no license is necessary to operate your own business in Second Life, it's impossible to tell who's managing a business even if on small scale and how successful those particular Metaverse entrepreneurs are. We must also remember that Second life is just one amongst many upcoming metaverses which can be chosen.

Many real-world businesses and organizations have set up shop in Second Life, covering a diverse variety of sectors, markets, and activities. ABN AMRO, Adidas, American Apparel, Dell, Harvard Law School, IBM, Microsoft, Pontiac, Reuters, Sony Ericsson, the Swedish Government, Toyota, and many others are among the companies that have done so. The majority of the time, communicating with customers is solely for marketing objectives. Early examples of businesses dealing in Second Life have been observed or publicized, but a widespread use of this platform in the supply chain has yet to be seen.

Due to the fact that the transaction comprises a digital and hence intangible replica of the real object, one major question that arises is whether someone selling virtual clothes or furniture can be called a store or not. This is a matter that needs to be investigated further and might be the subject of a future article. The progression of retailing from conventional retailing to electronic and eventually metaverse retailing, resulting in multiple space retailing, is examined in this study.

### *4. From Traditional to E-Retailing and now unto Metaverse Retailing:*

With the arrival of new technologies such as the Internet which has given birth to E-retailing that has completely changed how we retail. The Modification/upgrades introduced to the process of what goods/services are provided have altered the complete shopping experience. To begin with, important components of aesthetics and feel of buying a product (e.g., smell, taste, touch) are the spaces where conventional commerce has the upper hand, especially when the customer is not familiar with the type of product. In e-commerce, we have noticed this to be untrue, and products are usually returned if buyers are not content with its quality or features. On top of that, every demographic can be pursued through the means of conventional retail, whereas e-retailing may attract more to individuals seeking convenience or those that are willing to try out new markets. Furthermore, channel selection can be influenced through an individuals' exposure and understanding of the technology involved. The people that were facilitated by Internet (mostly young), for example, are projected to be more accepting towards the e-commerce than older customer categories. From a retailer's perspective, e-retailing presents a multitude of both problems and opportunities tagged along with it. To begin with, e-retailing may lower the amount

of capital required or alter the type of capital investments. Rather than focusing on the maintenance of tangible assets, the IT infrastructure that will support the transaction channel is now being prioritized. Customer data collection, storage, and use has grown crucial and is now a fundamental function. As a result, the skills required in conventional retailing have lost their value such as locations, employee selection, and management.

The focus in e-retailing has switched to IT-enabled logistics (also known as e-supply chain management), which increases order processing, customer relationship management, and interconnection. A creative, inventive, and open-minded senior management team that supports experimenting with new technologies and will not hesitate to exploit them to obtain competitive advantages is required to support such a transformation. Traditional merchants encounter issues that are distinct from those faced by e-commerce shops. Traditional retailers, for example, may encounter stock management challenges (e.g., product availability, limited choice), daily face-to-face interactions with consumers, line-ups in front of the cashier, 'cutthroat' rivalry, and the need to create the ideal shop environment for their customers. These result in a number of different key uses and problems for the two types of retailers.

### 4.1 Metaverse Retailing:

Metaverse retailing, or retailing that takes place in virtual worlds, is a rapidly expanding phenomena that might pave the way for the next generation of retailing, which would now take place in a three-dimensional environment, creating chances for both existing and new shops. Metaverse retailing may be seen as a progression of e-commerce in many ways.

Consumers have typically been seeking for the perfect product, according to Kotler and Armstrong (product-oriented, traditional retailing stages in Fig.1). Retailers reacted by giving the correct product to the right client (segmentation plan) and eventually developing a customer-focused strategy. Grocery stores, for example, have established several stages/levels for their own brands to meet the needs of diverse client segments. As a result, merchants' methods developed, with e-retailers seeing great success in creating and implementing customer relationship management technologies that made heavy use of the internet and targeted specific consumers via email. Figure 1 also demonstrates that we are now dealing with 'experience-oriented' customers, or those who are looking for a fresh and unique experience that metaverses, such as Second Life, may provide. A similar phenomenon has been described as the 'retail theatre' [31] in the retail literature, when shops give a unique and exceptional service and customers have more opportunities to connect and participate in the total experience. As a result, these customers don't simply want to consume the product or service; they want to engage with it and experience it in the three-dimensional metaverse.

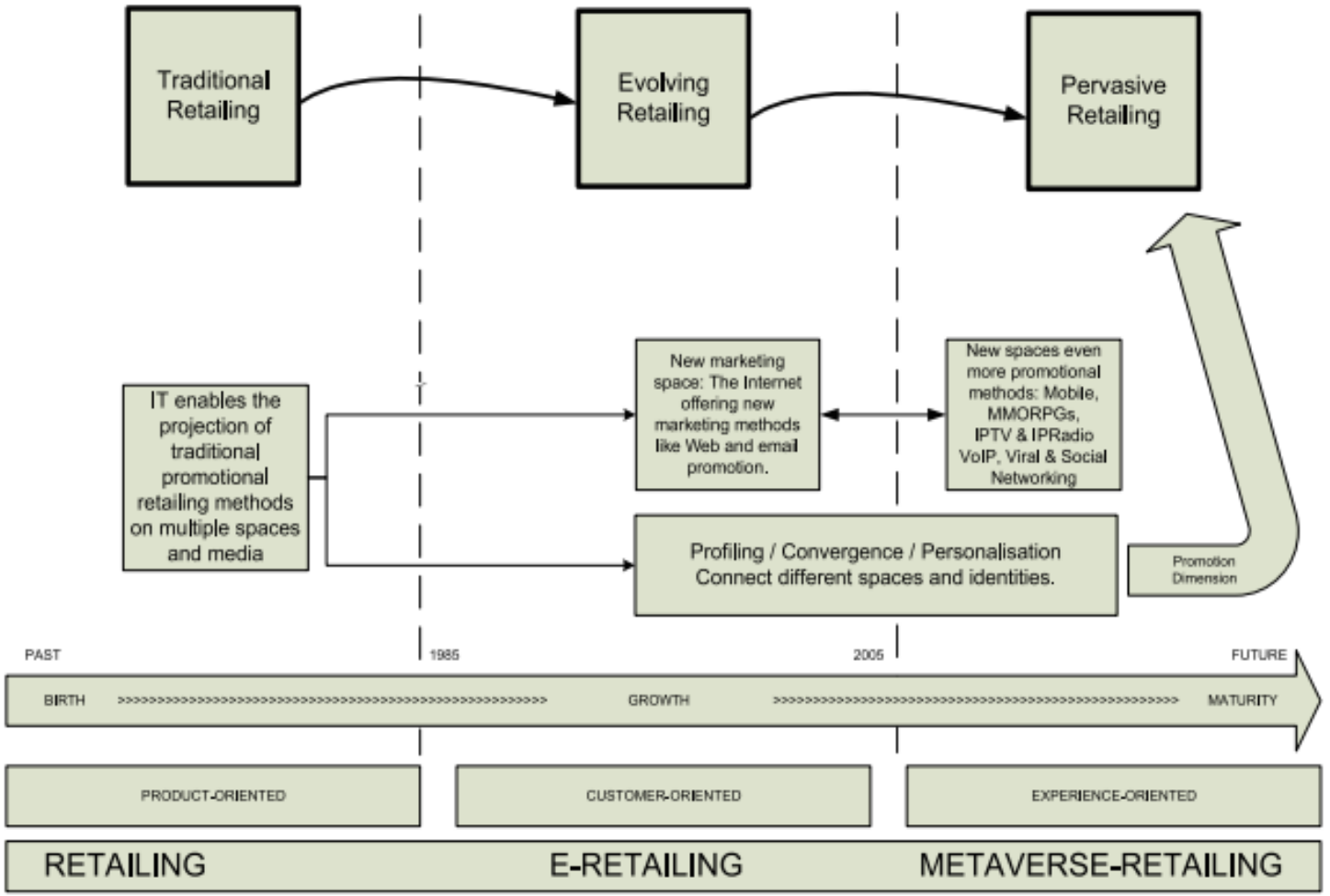


**Fig. 1** Retailing evolution: from retailing, to e-retailing to metaverse retailing

The new multi-space business environment necessitates a ubiquitous strategy to retailing (see Fig. 1), forcing merchants to employ a variety of promotional strategies and technologies to reach customers at all times and in all places (both online and offline). Treating each area independently may not be a realistic choice, since it is the interconnectedness of places that gives the most intriguing potential. This was illustrated when the first two areas, physical and online, collided, allowing retailers to investigate synergies. Metaverses might deepen these synergies by connecting to current Internet-based systems and leveraging existing infrastructure. In reality, web markets that offer metaverse material, such as SLExchange.com, demonstrate this. Other web-based services targeting metaverses users, such as a social networking service and a search engine, have also surfaced. The 3D environment might then be leveraged to improve the user experience while existing services may continue to function in the background. Instead of visiting to Tesco's website, a user might go to the virtual supermarket, pick up a shopping basket as if it were real, and wander the aisles, picking up the items needed. The items themselves may be shown to the customer as 3D objects to make the experience more realistic, or they could be exhibited on the shelves as photos, similar to what is now happening on the internet. Even though it simply exists in a virtual environment, the real-world-like experience of physically visiting a supermarket may give a better buying context than one provided by a website. On the other hand, for the customer, 'conventional' web-based retailing may be a far speedier and more convenient shopping tool than a more context-rich approach. Retailers, on the other hand, can offer consumers the option of shop space if they have both online and metaverse retailing technologies in their toolbox. Consumers may then choose whether to shop offline or online based on their unique interests and circumstances, which is similar to choosing whether to purchase online or offline.

### 4.2 Retail promotion in multiple spaces:

Figure 1 also shows how different promotional strategies are used at different phases of the retail lifecycle. This section will go through these strategies and the tools that go with them, as well as how they may be used by traditional, electronic, and metaverse shops. Direct mailing, in particular, has been recognized as one of the earliest promotional techniques utilized by businesses, with conventional store-based shops employing promotional tools like as coupons, tokens, presents, and bogofs. Store loyalty cards are also used by retailers to provide extra points (and incentives) when customers purchase things, allowing them to take advantage of their loyal customers' buying habits and capitalize on repeat purchases. E-retailers employ these technologies as well, in order to take advantage of the cross-selling opportunities provided by the Internet selling medium. In addition, they try to make distinct price comparisons and make their website as appealing as possible. Furthermore, to maximize their success, Internet retailers organize personalized promotional campaigns, despite the fact that, despite technological advancements over the last decade, a holistic approach to delivering personalized messages and keeping track of the process is still too time-consuming.

Nonetheless, Internet users create accounts and profiles in order to access retail items and services, which are then utilized to personalize them and serve as a platform for targeted advertising. Even if profiles aren't accessible, a user's engagement with an online shop, such as a search engine, gives a wealth of options to send customized messages. In Second Life, similar profiling approaches might be emulated, but in a very different way.

A tracking system may, for example, detect which sorts of furniture customers spent the most time looking at or even trying out while browsing through furniture in a virtual shop. The system might then give recommendations and perhaps provide a discount if the user has been recognized as a former client, potentially in the guise of an automated shop assistant. Tracking users raises privacy concerns, but this is no different than tracking people as they navigate online sites using cookies. Targeted advertising is performed in more sophisticated circumstances by looking at group profiles, with the retailer's Amazon strategy, 'users who purchased this item also bought this item,' being the most renowned example of all. Similar tools are available in Second Life in a variety of situations. Users, for example, are evaluated by other users in a variety of areas, and shops frequently urge users to vote for a location so that it might appear in popular spots and therefore draw more attention. There are other search options based on a variety of factors. Even yet, the aforementioned are only available at a 'platform level,' not at a store level. Retailers also employ customized mobile phone promotions in order to send their message everywhere, at any time. As a result, mobile devices, particularly mobile phones, are an essential tool for shops, providing limitless advertising opportunities: "While it is undeniably a powerful one-to-one communication channel that can be readily personalized, it is also an important conduit for tying together the various strands of any multimedia marketing and/or marketing campaign." If utilized properly and efficiently, it is a ubiquitous and instantaneous point of confluence with an enviable reach". Customers may become the perpetual recipients of promotional messages for services and items; thus, businesses should be mindful that frequent message bombardment might become a "curse" for them. This is frequently the situation in metaverses when a person enters crowded shopping places. When an automated system detects the presence of a user, it sends out 'notecards' with information on various items and services. Freebies, such as a promotional t-shirt, are sometimes given out instead of notecards. Even while an automated agent may be muted, having to do it many times might be annoying and aggravating.

The common thread running through all of the above is that merchants are now using various advertising methods for distinct venues. Simultaneously, we are progressively dealing with many areas that are extremely linked, interrelated, complex, and integrative currently. This means that merchants' promotional tactics (and not only these) should include an overall and comprehensive strategy that takes into consideration the numerous areas in which they operate. Retailers should also take note of the rise of a new consumer who is more interested in the experience than in the goods. As a result, standard retail marketing mix methods may not necessarily work in a different context, such as the metaverse. The gradual creation of a new

retail marketing mix that captures the dynamics and distinctive tenets of the metaverse phenomena while focusing on the 'experience' factor may be urgently needed. The current study focuses on one facet of the retail marketing mix, namely retail promotion, with a particular emphasis on the retail theatre idea.

## *5. Conclusion:*

*"Marketing must go where the people are, and so, synthetic worlds are the logical next frontier. At least as attractive as their numbers is the intensity of participants' engagement with these environments. But marketers must beware: synthetic worlds offer the chance to be part of a dream—or to kill it."* – Castronova, E. (2005).

Metaverses are a substantial expansion of the typical retail business environment, which already has an impact on many retail operations for forward-thinking businesses.

The concept of metaverse retailing presents a number of research problems. What, for example, is the consumer's influence on this retailing revolution? What is the consumer's reaction to various retail levels, such as conventional, e-retailing, and meta-retailing? We must also consider the business component in addition to the consumer. A successful brick-and-mortar business may not be successful in e-commerce or even metaverse retailing. Even if they are, people will need to make crucial judgments about which metaverses to engage in, similar to how they position themselves in the actual world. Furthermore, study will be necessary to determine the important ingredients for success on all three levels at the same time. Is this, however, both operationally and financially feasible?

The preceding also raises a number of issues in terms of retail promotion. Which sort of promotion, in particular, can operate equally well at all phases of the development, be transferred, and be effective at all level? Is it possible that simultaneous advertising at all of these phases will harm the retailer's reputation, or is it preferable to safeguard the retailer's brand and image by focusing on promotion at one or two stages only? Metaverse retailing may not be the answer for every shop out there, as we have already noticed with many conventional stores losing revenue while transitioning to e-commerce. On the other hand, there are shops, such as Tesco, that experiences success in both store and online selling, is a potential contender in terms of a successful metaverse commerce. Which retailers, on the other hand, will have a better chance of succeeding in Second Life? 'Traditional' retailers, e-retailers, or retailers who have succeeded in both stages? Another major study problem is that in Second Life, shops do not offer products or services; instead, they sell the "experience of utilizing the product or service" by operating in a variety of places and surroundings. Are we dealing with a different form of retailing and consumer satisfaction that has to be handled as a result? These are some of the concerns that have arisen as a result of our present work, and empirical study is urgently needed to shed light on them from many perspectives.

Finally, the current work has highlighted the critical necessity for policy development. Will Second Life shopkeepers be taxed on their earnings if they do not move the money outside the virtual world? It is still controversial if virtual currency is genuinely a real currency. Which regulatory agency will be in charge of ensuring that these retail sales are properly priced and that customers are not exploited? Will a Competition Commission emerge in Metaverse retailing, similar to the one that exists in UK shopping, to ensure that metaverse stores operate efficiently? What criteria will a store use to create a presence in Second Life? There are now none, allowing for the development of potentially unethical activities in terms of product and service advertising, price, and sales. The aforementioned policies must be of high concern to the stakeholders and must be addressed right away in order to make Metaverse Retailing a dream come true.

## *6. References:*


i. Li, F. (2007). What is e-Business? How the Internet transforms organizations. Oxford: Blackwell.

ii. Li, F., Whalley, J., & Williams, H. (2001). Between the electronic and physical spaces: implications for organizations in the networked economy. Environment and Planning A, 33, 699–716.

iii. Bourlakis, M., Papagiannidis, S. & Li, F. Retail spatial evolution: paving the way from traditional to metaverse retailing. *Electron Commer Res* **9,** 135–148 (2009). https://doi.org/10.1007/s10660-009-9030-8

iv. Castronova, E. (2005). Synthetic worlds: the business and culture of online games. Chicago: University of Chicago Press.

v. Castronova, E. (2005). Real products in imaginary worlds. Harvard Business Review, May, 20–22

vi. Linden Labs (2008). Economic statistics. http://www.secondlife.com/whatis/economy_stats.php. Accessed 21 August 2008

vii. Papagiannidis, S., & Bourlakis, M. A. (2007). Advertising in the networked environment: Implications for fair use, media convergence and consumer privacy. In M. Quigley (Ed.), Encyclopedia of information ethics and security (pp. 15–22). Hershey: Idea Group Reference.