

Virtual World Commerce: The Advent and Its Dimensions
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Introduction to Virtual World Commerce

The further evolution of commerce and the Internet is inevitable. To facilitate industrial growth, avenues of new revenue for established businesses and entrepreneurs have been continually sought after. With the propelling force of the digital revolution, the one time text-based Internet, which has more recently been expanded to the platform of the World Wide Web, has steered the way for the development of new Virtual Worlds and of 3-D Internet environments. Collectively, these Virtual Worlds, together with other physical reality interactive technologies that function together with them, form a new paradigm for society and global economy. Once spoken of only in esoteric technological communities, but now more commonly spoken of, this has been referred to as the Metaverse.

The term “Metaverse” was coined by Neal Stephenson in 1992 in his science-fiction cyberpunk novel called *Snow Crash*. This book depicts a worldwide network of computer servers united as one 3-D platform where online activity, especially commerce, is conducted by user controlled characters called avatars. From another book written in 1984, called *Neuromancer*, William Gibson portrayed a similar such platform which he referred to as “Matrix” and, subsequently, coined the term “Cyberspace”. Thus, a more immersive experience to what is called Internet has been a predominant idea in futuristic literature with the concept growing in popularity in our culture as also expressed through movies such as *The Matrix* and *Avatar*.

Despite Stephenson’s original definition for the word, whatever form of a global virtual world platform that may manifest in the future, which may be called “Metaverse”, this will be what ultimately will be referred to by the term universally. However, for this research paper, latest, new or redefined phrases and terminology will be presented in order to develop a framework to discuss the various forms of contemporary and forthcoming business technology within and surrounding Virtual Worlds.

Background to Virtual World Commerce

Virtual World Commerce, mentioned henceforth herein as simply VW-Commerce¹, is a subtopic topic of E-Commerce just as E-Commerce is a subtopic of commerce itself. E-Commerce has traditionally and generally been recognized to be through the portal of the World Wide Web but now has been further observed as expanded into the frontier of Internet-accessible simulated environments. Due to that the widest number of examples of VW-Commerce may be found in the popular Second Life, this specific virtual world will be discussed here as a prime example in many instances.

Earliest and most commonly noted of current developments of VW-Commerce are the physical currency purchases and sales of virtual world items within Massively Multiplayer Online Role-Playing (MMORPG) Games such as World of Warcraft™ and EverQuest™. This is a convenience for the buyer from whom it would cost more in time than money to obtain such virtual items in these virtual environment games. While most MMORPG game hosting companies have traditionally resisted the practice of “real-world trading” in the Terms of Service (TOS) for their virtual world games, the exchange of such, though subject to taxation, has not been illegal by most physical world governments. In latest years, sales of certain virtual items have been transacted by game-making companies themselves.

Within and beyond gaming, though, it has often been that businesses have faced a number of challenges to broaden their horizons to promote their brands, services, or products in Virtual Worlds. Confronting issues such as user identity, transaction security and incorporation of cross-technological advantages with currently used technologies have been of concern. Howbeit, the greatest hurdle to the success of VW-Commerce has been that of the establishment of viable Metaverse business-to-consumer (B2C) models.

Popular Virtual Worlds, such as Second Life™ and There™ had experienced a hype of enthusiasm during the years of 2006 and 2007. By 2008, as the hype wore off, disappointments grew. Second Life faced a falling out of in-world businesses as businesses cooled in Virtual Worlds, though the education sector was yet hot during this time. A parallel to the Dot-Com Boom and Dot-Com Fallout of the World Wide Web's E-Commerce was evident. In comparison, both platforms experienced the gold-rush of entrepreneurs with high expectations, reaching as far as believing their mere business presence on these new platforms would yield a rapid return-on-investment for their expanding or new companies. It appears that the hard lesson to learn is to understand that the same underlying rules of conducting business do not change from the physical to the electronic. Substantial businesses are built with patience and over time.

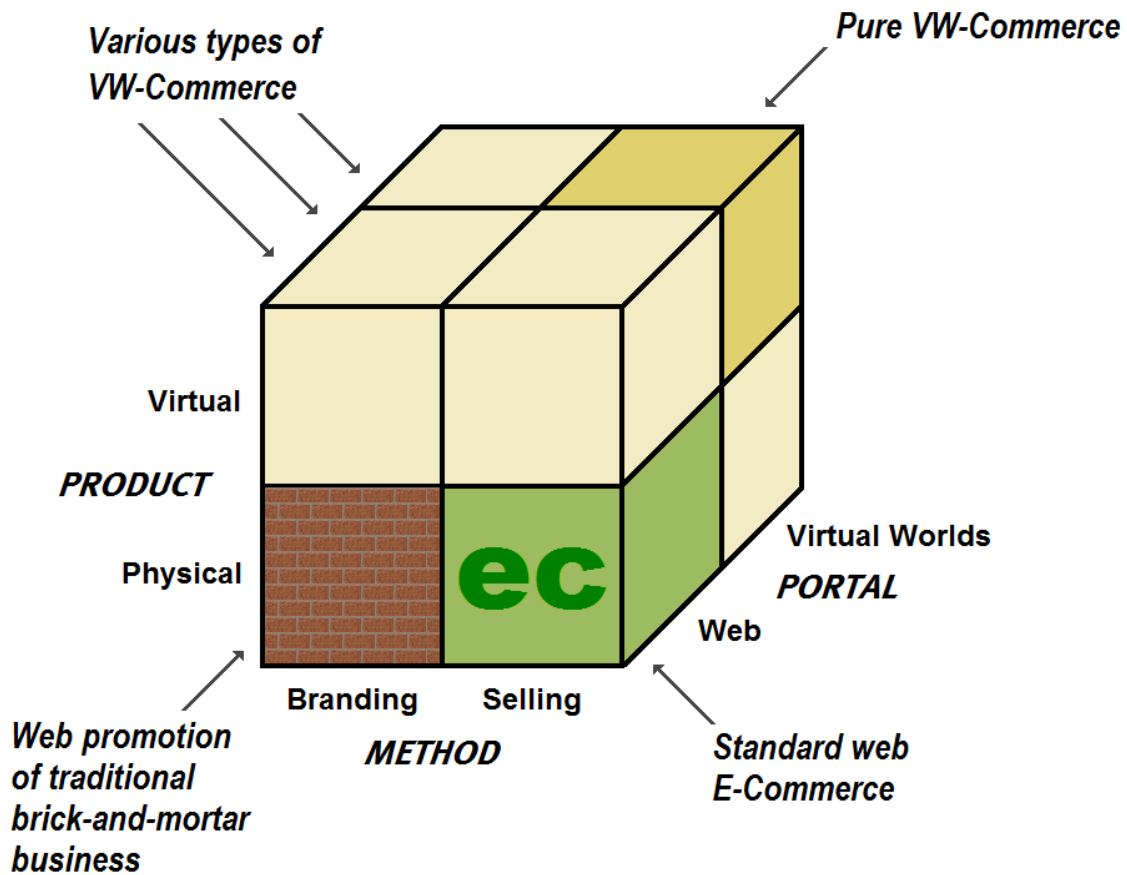
Building customer trust relationships and conducting marketing analysis while testing new methods are still essential elements to business success. Though comparisons may be made to standard web commerce, VW-Commerce presents yet a new archetype, and one often puzzling to the uninitiated. When companies moved into Virtual Worlds using the often impersonal elements of the web's E-Commerce, it was a rather poor initial business model presumed upon to be esteemed workable. If mere presence on the web demonstrated a weak business model, attempting to reproduce the same for an interpersonal media such as Virtual Worlds were destined to produce even poorer results. In retrospect, it had been estimated that a Consumer-to-Consumer (C2C) trade model, more than that of Business-to-Consumer (B2C), was likely to become the driving force to usher wider adoption of VW-Commerce².

All too quickly, the large simulations in Second Life developed by corporations and entrepreneurs became empty museums and “ghost towns” due to that viable virtual communities for company brands were not built and that rarely was there staff present

to greet visiting avatars. It had been found that smaller and more economical simulations, possessing active in-world staffing, provide a better start to “test the waters” to the find the business hot spots. Yet, like unto how E-Commerce rose, then fell, to rise once again, having been a learning experience for many through the “school of hard knocks” on how to conduct effective business in the then new media of the web, the same scenario has been developing for VW-Commerce in the ever-growing Metaverse.

In further examination of Virtual Worlds and its commercial capabilities, let it therefore be observed that Electronic Commerce web technologies at one time were hyped in over-expectation as well as having faced the rejections of over-criticism. In this manner, examination of how Virtual Worlds provide a commercial function is demonstrated through both its technical capabilities and its popular effectiveness. Virtual Worlds often vary in theme, capabilities, and forms, therefore, it also should be noted that comparisons of these with each other may be like that between apples and oranges.

The Dimensions of Virtual World Commerce³



Virtual World Commerce may be described in three dimensions, namely, that of product, method, and portal. Observed together, these dimensions reveal the varied facets of VW-Commerce and how it steps up from the foundation of standard forms of E-Commerce through the web. The product dimension includes goods, information, and services that reside either in the physical or virtual environments.

The exchange of electronic products, ranging from goods to services to information, may be viewed here as residing within the border of these two realms. These function in a vehicular manner through the portal of the Web. Through this understanding it is discovered that general Virtual Worlds, also referred to as Metaverse, are manifest as an additional commercial-capable platform that is built upon the Internet besides that of the World Wide Web.

The method of branding serves as the beginning process to which selling completes the full-cycle of commerce. Though, branding is not, of itself, commerce, yet it is an integral and indispensable part of that which composes all continuing commerce. Frequently, VW-Commerce is demonstrated and made more effective through a combination of various combined elements within these dimensions. To continue, "The Dimensions of Virtual World Commerce", as presented here, shall be described in following summaries.

Physical Products through the Web

Until online product ordering is conducted by a brick-and-mortar business, the web is used to establish but a simple presence on the Internet to establish their brand. A company's physical address and telephone contact information on the website is a common start until a product catalog and electronic transaction capabilities are set up. Web tools that have been developed over the last decade or so have made the process to establish E-Commerce more simply.

To meet consumers closer to where they are at, E-Commerce, performed through the web, has provided a more convenient and rapid way for both seller and consumer to interact and conduct business. Various methods to improve interaction such as online chat support, various intelligent electronic advertising targeting methods, and process confirmations have increased the competency of online commerce. New methodologies to interact with customers are continually sought to further the effectiveness of such marketing.

In relation to VW-Commerce, virtual world users have expressed interest as to when their favorite virtual objects will become available from physical world retailers.⁴ Clothes styles, homes, automobiles, and a variety of other items, conceived in the imagination and prototyped virtually sets Virtual Worlds as an additional proving ground for consumer testing. Due to such consumer preoccupations with advancing forms of electronic community, the attention of businesses has been gathered to such new media.

Physical Products through Virtual Worlds

Companies such as IBM™ have established their presence in Second Life™. Coca-Cola™, Scion™, and CosmoGirl™ have likewise set their brands in There™. Various other companies have also entered these and other Virtual Worlds. Virtual item copies of physical world items have been created to encourage the brand and purchase of their products. This has provided the opportunity for product demos that are sight-and-sound related to be experienced in the 3-D environment.

Virtual event hosting, such as disc jockeyed virtual dance parties, has helped popularized brands and to build community surrounding companies and their products. Such events that are common to be attended by avatar users worldwide become as memorable as any physical world event. Screenshots and videos of Virtual Worlds have been posted on blogs, social networks, and other websites and have been reported about by various news media.

Second Life avatar TheDiva Rockin hosted a pool party at the Crayon sim (simulation) as part of Coca-Cola's Virtual Thirst campaign. This campaign drew the attention of both avatars inside the virtual world and of media reporting outside. For the Virtual Thirst campaign, community participation to submit imaginative ideas and to participate was higher in numbers than were anticipated. Obviously, a simulated drinking of soda pop in a virtual world by an avatar serves neither to satisfy the thirst of a person nor that of an avatar, but the observation of this and participation in such virtual events with avatars had successfully enticed a physical world thirst for drinking Coke™.

Despite past issues regarding security, the sale of physical products through Virtual Worlds has been successfully accomplished on the technical level in Second Life with significant issues addressed. However, due to those past issues, the much sought for increase of consumer confidence which was being cultivated for this new platform had instead diminished. While at the same time Second Life was experiencing a fading of its hype. There was also lacking successful working models for B2C VW-Commerce. A number of corporations had, consequently, pulled out of their sims in Second Life. The VW-Commerce experience had been short lived for some corporations. Yet others, such as I.B.M., maintain their virtual world presence and continue to gain experience with what many expect will eventually produce successful business profit due to the growth of Virtual Worlds.

Dell's attempt to sell their PCs in Second Life™ was likely generating far less revenue than their hopes. Nonetheless, there are those such as Grace Buford, known in-world in Second Life as Cylindrian Rutabega, who sells her music CDs at the Trax sim together with other musicians. The virtual money called Linden dollars is purchased for physical world money. The Linden dollars are then used to purchase physical CDs that are then shipped to a physical world location. Cylindrian's music success and growing fan club have been built according to the popular VW-Commerce C2C model of interpersonally building relationships and community within the virtual realm.

Earlier in the month of the release of this research paper, the virtual world of There™ closes. Although business clients had continued their in-world presence and additional features were added to improve the world of There™, this did not prevent recession to cause the significant drop in customer users.⁵ Recession, however, has not stopped popular sale of new MMORPG games such as Aion™ which was released in September 2009. It should also be said that competition between virtual worlds and virtual games also becomes a major commercial consideration. Although a steady client-user loyalty base represents a stabilizing factor, yet the superior platform gains the advantage as technology moves forward.

The value and necessity of building business relationships does not diminish through electronic media although often this has been often wrongfully deemphasized for business on the World Wide Web. The web has not been a refined media for building interpersonal relationships, though this has been changing due to the advent of social media. Virtual worlds provide the next step further. A leading expert in the subject of avatars is Bruce Damer, who wrote...

*Perhaps the virtual world, like the telephone, is just another way to make contact with fellow human beings. The telephone has extended our community of friends and family, overcoming the isolation of distance, while bringing humanity closer together. I believe that the virtual worlds of avatar cyberspace will be as important to the twenty-first century as the telephone is today.*⁶

Sales intermediaries in Virtual worlds have a unique opportunity to develop new clients and to build their social networks on a more interpersonal manner than mere text messaging. Voice capabilities within Virtual Worlds add further to this. Together with use of 3-D media presentations, such business opportunities may be heightened. In addition, E-Business collaboration is given a rich feel in simulated realities. Seeking to find new customers can often be the better way than simply have the customer find you. Discovery and employment of new viral methods function to the advantage of product sales and can tip the point to create a new trend for even an old product.

Virtual Products through Virtual Worlds

The model of product branding within Virtual Worlds is not such as advertising that uses push-media like television, radio and magazines. With somewhat unique methodology, Virtual Worlds have functioned interactively, user-to-user, and more robust than that of the World Wide Web. As this is so, the virtual world itself takes on its own culture and has become a relatable environment of its own. Users frequently identify themselves quite personally with their avatars. These virtual world identities have even been used to represent oneself even in the physical world, including in matters of business where the avatar becomes a chief branding symbol of a VW-Business. It has been in this manner that C2C commerce has been more readily adapted to the virtual environment with in-world virtual items being the common forefront of commercial focus.

The *Metaverse Manifesto*, a book describing sociopolitical issues around Virtual Worlds, states that “Attention economy gives way to the perception economy and the power is shifting to the Reality-creators.”⁷ The online culture of the web has but a limited sense of this, being customarily based in what has already been established in physical reality. The web has been used well to project positive, deceptive, or even façade identities for use in the physical world. The Cyberspace of the web is not a world of its own but it has been expanding into such through the advance of Virtual Worlds. For adherents to Virtual Worlds, individuals define themselves as well as their own reality, expressing this through whatever world of their choice. In essence to say, “We are not who you say we are but are who we say we are.” If the change of consumer interests were not changing rapidly enough as they were, the self-actualizations expressed through Virtual Worlds cause even a wider number of interests and a more rapid change of them.

To contend with this new commercial market, advertising that principally reflects the generic virtual world and avatar culture has been portrayed recently through television and other media advertising. As the generic virtual world fads wear thin, though, the specific interests and cultures formed within these virtual worlds will need to be the campaign targets and not simply the avatar culture as a whole. In order for the commercial company to close the gap between themselves and their intended consumers, they will, by necessity, need to meet the consumer where the consumer is at, even if where the consumer is at is in a new, yet growing popular culture, arena of Virtual Worlds. Should corporations fail to do this, they will lose ground with consumers to identify themselves with their corporate brands. Older media advertising loses ground to what newer media advertising has to offer. Dare companies grow obsolete in either their products or their methods?

Though the sale of physical products in Virtual Worlds has been less than admirable, thus far for corporations, the yet popular use of Virtual Worlds has continued to generate business within them for the sale of in-world products. Such products, modeled from the physical world or conceived from imagination, have not only been a means of entertainment but have also been used in-world to facilitate for the work of college educators, various speaking and media event hosting, and also Machinima (machine + cinema) for the production of various purpose videos where avatars replace actors.

Creation of virtual world items, such as in Second Life[™], has been found to generate extra income for some developers using the technology. For most in-world product vendor, the income has reflected that found in more of a third-world country. However, when such items are sold through experienced commercial developers to design simulations, this has generated a more substantial income, especially with corporate customers. As early as the beginning of 2006, Ron Blechner, a.k.a. Second Life avatar Hiro Pendragon, quit his job as a cellular network technician to become a full-time Metaverse developer, creating a virtual presence for companies, non-profit agencies, and educational institutions.⁸

Once noted as the highest for generating income though Second Life was virtual real estate. From profit earned solely from within a virtual world, Ailin Graef, a.k.a. Second Life avatar Anshe Chung, became the first to obtain a net worth in excess of one million U.S. dollars.⁹ Virtual world land transactions were a popular form of income until this decade's recession which resulted in a decline in virtual property values.

Virtual land, though exchanged by avatars, is not created by them. The initial sale of virtual land is done through virtual world providers, who are the true owners and gatekeepers of their own virtual universes. These providers, who sell the virtual land, make the laws for their own worlds. Beyond the cost for the land itself, utilization costs for the land are expected, which parallel physical-world taxes. This pays for server space and maintenance of simulation space provided.

Avatar Bam Camus, who started her store Haute Couture as a small designer studio, has become one of the top designers in Second Life. She sells a wide range of men's and women's apparel, avatar skins, shoes, as well as jewelry. She later sold her virtual land, preferring to rent land in order to partner with others as she continues to sell her product line at her new store Intimate Moments. Both renting virtual land and renting out virtual land has been useful to balance and/or alleviate costs. Virtual services have also been available in Second Life. From early years in Second Life, avatar Baccara Rhodes has conducted full-service in-world avatar wedding ceremonies that include all aspects of a wedding at a cost of several hundred U.S. dollars.

Professional avatar staffing services have been available through the Metaverse Mod Squad and other companies for various Virtual Worlds. Greeters, entertainers, event managers, as well as security personnel and other roles may be hired. Many of whom are experienced with the work. Various service business roles may be found in Virtual Worlds including musicians, dancers, builders, and designers.

In Second Life, programming language "scripters" of Mono or LSL (Linden Scripting Language) may also be hired. Hiring for virtual world jobs may also be performed through a physical world company through other means of communication such as web or telephone. For larger endeavors there are companies, like the Electric Sheep Company, that provide services. Rivers Run Red also makes it possible for companies to obtain a virtual world presence.

Pornography has been known to financially fuel pioneering media as such as had been years ago with the Betamax. It had been said that some of the best of pornographic photography was depicted when the technology had just come out. The porn industry also advanced early and rapidly on the World Wide Web. The same pattern has been demonstrated through Virtual Worlds. Kevin Alderman, a.k.a. Stroker Serpentine, has built his VW-Commerce business of Strokerz Toyz in Second Life selling items such as sex beds and various avatar genitalia object attachments. He sold his Amsterdam sim for U.S. \$50,000.¹⁰

MMORPG games frequently have markets in-world to exchange items for game money. For whatever time or effort it takes to obtain a game useful or powerful item, such as a game weapon or potion, this is reflected in its value as an exchangeable commodity. Trade has been commonly known to be the most basic element of commerce. Trade has not only served wants and needs but also has helped establish interpersonal and group relationships. Trade has also been a means to help establish peace, create liberty, and to increase the number of jobs. Though trade has been longer established on the Web through E-Bartering, Virtual Worlds yet gain some distinct advantages in the arena of trade through the more personable presence expressed through avatars.

While some people maintain that virtual items are not “real”, it does not change the fact that the users are real people and are conducting a real exchange. This is although the exchange is of what may be esteemed as consisting of what is unreal. The matter of whether virtual items are real or not either fades to obscurity, or perhaps becomes more hotly debated, when such are sold for physical world profit.

In addition, virtual currencies have also been exchangeable commodities. It is possible to purchase virtual money by credit card from within a number of Virtual Worlds. The sale of virtual money is generally not allowed by MMORPG makers due to that it would give license to cheating in their games to gain an unfair advantage. However, for virtual world providers that are not creating competitive games, they have other concerns regarding physical world trading of their virtual money, such as that it causes instability of its value. Entropia Universe and Second Life allow the sale of their virtual monies through a web interface, while yet, exchanges outside of their own are but only discouraged.

Though objects in Second Life may be set not to be able to be copied by anyone other than their creators, an issue arose where debugging software for object back-up called Copybot was used to copy virtual objects created by others without their consent. Though the problem was not widespread, though fears had traveled far, this did subsequently cause a threat to the economy of Second Life due to the outcry of the commercial developers. Linden Lab, the creator of Second Life, responded most seriously to address this problem.

Virtual Products through the Web

Though in MMORPG gaming, the purchase of in-game items for real world currencies has been a continuing, though often disapproved, industry, such is not the case for Virtual Worlds. At the first, virtual items and virtual money were only able to be exchanged within their respected Virtual Worlds. However, this has changed. It has been made possible to purchase Second Life items through the website interface of XStreetSL.com. The ability to use credit cards to purchase the virtual money which on the web to purchase virtual items has turned Second Life into a global marketplace. As thus, virtual world money has come to possess not only a physical world value but a more readily exchangeable one.

As far as most game companies are concerned, the external exchange of their games' money and virtual items for physical world money has been a black market, due to that it gives unfair advantage to some players. Some companies in the East have engaged in the business of "goldfarming" to gather money within Virtual Worlds and to sell it through their website. Formerly, eBay was used to exchange virtual items but later restricted the practice.

Though criticized about by game companies and by respectable MMORPG game players, the practice of physical world exchange of virtual items has not widely been unlawful. However, the sale of virtual items for currency is subject to taxation and has come under observation by various governments. The government of the People's Republic of China has declared to its citizens that virtual currency is not to be traded for physical world goods or services.¹¹ This ban, however, does not extend to the purchase of virtual items. Given that MMORPGs and virtual world monies have a quite stable value, they are a capable threat to various nations' currencies.

Emergence of Virtual World Commerce

Despite the economic downturn and the decline of active platform simulations, there is yet an increase in general use of Virtual Worlds which has continued to spur the interest of companies that have been seeking new avenues to collaborate with consumers. Market analysts have anticipated an emergence of E-Commerce through Virtual Worlds.¹² According to recent research published by Gartner...

*Recent discussions with clients indicate that some are considering discontinuing investments and projects utilizing virtual-world technologies. We believe this is a false economy at this point in time and that tightly focused projects will deliver results in the next nine months.*¹³

The current and manifest cultural interest in Virtual Worlds, as expressed through movies and television, reveals a commercial market and target audience. Personal self-expression has moved to 3-D and gone beyond that of the social networks of MySpace and Facebook, which are ever-changing. Virtual Worlds and MMORPGs develop specific age, gender, and interest communities that are useful for commercial targeting by various, including larger, companies.

Hosted virtual world events represent a great cost savings compared to those held in the physical world. Costs for convention equipment and fair props are greatly reduced while travel costs for both host and attendees are even eliminated. Audience participation is eased as questions may be asked and answered more readily. Virtual Worlds have the ability to provide a method of direct communication between corporate executive and their grassroots customers.¹⁴

Projected future of VW-Commerce

The “Metaverse Roadmap”, co-authored by Jerry Paffendorf, depicts the Metaverse being based in four key components, namely, Virtual Worlds, Mirror Worlds, Augmented Reality, and Life-Logging.¹⁵ The coming together of these technologies produces an increasing integration of physical and virtual lives of individuals. As a platform, this will become more popular for regular and consistent use than the World Wide Web of today.

As a primitive example of the evolving and emerging Metaverse, the iPhone has been used in basic forms of the capacities which the Metaverse Roadmap describes. Not only may Virtual World games be played but may also mirror the physical world through location based real time strategy games.¹⁶ Google’s location based advertising provides iPhone users ready information to augment their physical world experiences by supplying useful information. As user data is gathered, logs of this information likewise become useful to provide for other users and for marketing. As these technologies further blend together in integration, such as like hypothesized with Second Life and Google™ Earth merging into one Metaverse¹⁷, it is then that VW-Commerce becomes the forefront and ready mainstream of online commerce.

Conclusions regarding VW-Commerce

Virtual Worlds are still early in their development as an Electronic Commerce platform. Although they are not yet nearly an end-all method for doing online business, they nonetheless provide an additional channel to cultivating business with newer and expanding capabilities. Up till present, it has been more often that start-up companies within Virtual Worlds and developers who specialize with them have yielded more notable business growth than the click-and-mortar businesses did when they entered this arena. This is expected to shift, though, as various sectors of Virtual Worlds expand into more common use. The well noted author on Virtual Worlds, Edward Castronova, has written...

*If synthetic worlds become a place that just about everyone visits, the flow of trade that passes through cyberspace will be quite substantial, and those companies that go “out there” and take advantage of it may find themselves operating in a libertarian’s dreamland. ... we cannot predict how the emergence of fantasy worlds with real economies will shake up the relationship between business and government.*¹⁸

As established businesses continue to gain their knowledge and experience in Virtual Worlds, they will advance in the ability to market individuals in a more personal manner than has ever been available electronically before. This will exceed and redefine the current demographic model for advertising. The advancement of 3-D Web technology will supplement this by facilitating improved tracking of virtual world customer behavior and patterns. Detachment from consumers fades as direct marketing finds a new home.

References

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