

DADENLIMITED

Virtual Worlds and Serious Business

A White Paper and 9 Point Business Plan

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"If, as seems likely, virtual economies do catch on, there will be many new spaces in the 'world above the world' for people to inhabit. Globalisation could acquire a whole new dimension. The implications could be far-reaching. Will leisure become less distinct from work... If economic activity starts to migrate into the virtual sphere, would this ease some of the environmental constraints on growth?"

– UK Economic and Social Research Council (ESRC) and Tomorrow Project funded report "Going Global: Key Questions for the 21st Century", Moynagh & Worsley, Jan 2008

Intraworlds

Just as the Internet used within a business became known as the Intranet, so the term Intraworlds has been coined for virtual worlds which are only accessible from behind the corporate firewall.

Intraworlds provide a virtual world in which an organisation can safely discuss its most sensitive issues, examine its most critical process, data and information, and train educate its staff in complete privacy.

Introduction

Virtual worlds (VWs) first came to public prominence in the summer of 2006 when companies like American Apparel, Aloft Hotels, IBM and the BBC made their first forays into Second Life.

Since then much has happened. Of those 4 companies only IBM is still active in Second Life, but the BBC has launched its own virtual world, and the bold (but failed) experiments of Aloft and American Apparel have been followed by hoards of brands entering Second Life, and a few other virtual worlds.

This paper is an attempt to learn from what we have seen since that summer of 2006, and identify the areas where virtual worlds are able to deliver real business benefit. All of our learning in this area is summed up in our **9 Point Virtual Worlds Business Plan**.

For a more general introduction to virtual worlds please see our earlier Virtual Worlds and v-Commerce White Paper, or if you want to know where the future lies read our **Virtual Worlds – A New Medium or Virtual Worlds – A Future Roadmap**.

What is a Virtual World?

At its core a virtual world is:

- A computer generated 3D environment
- populated by avatars (which are visual representations of users, and usually human controlled)
- who can interact by voice and type
- and can watch videos, listen to audio and view other media (e.g. PowerPoint, and maybe even Word/Excel documents)
- and can make and code objects from jewellery and clothes to vehicles and skyscrapers, and retain their IPR in them
- and can sell and buy those objects using a currency (which may be fully convertible to real-world currencies)
- and who set their own goals (there are no preset "quests").

The point of a virtual world is that it is what you make it. Unlike a game like World of Warcraft a virtual world has no rules over and above those that you find in the real world. It is up to you when you enter a virtual world whether you decide to use it just to chat, have fun, relax, or make money, and whether you do these things purely in the world, or as an extension of your real-world activities.

Second Life is the virtual world which has seen by far the greatest amount of activity. This is a combination of the fact that it is free to users, cheap and easy to build in, requires no "deals" with the world owner, and supports a highly creative and (generally) mature user community. But other worlds do exist out there and we will consider these in more detail later.

Second Life

Second Life is owned and operated by Linden Labs. Linden Labs is backed by a number of prominent US venture capitalists including Benchmark Capital and Mitch Kapoor - the founder of Lotus and inventor of the spreadsheet.

Second Life opened in 2003. Since then it has grown steadily, both in terms of built area, users and transactions.

Users can get free or \$9.99/month accounts. They can design their own avatars based around a body form template, and buy more clothes, templates and accessories.

Second Life is the most developed and complex of the current virtual worlds. It also has an extensive social system with users belonging to one or more groups reflecting their in-world and real-world interests.

Unlike most games the Second Life currency can be bought and sold for real currency. The in-world economy is worth in excess of \$1 million a day.

Linden Lab is now developing Second Life Grid, which uses the same technology as Second Life, but is a platform which businesses can use to make their own virtual worlds.

A New Medium

Our constant message to clients is that you have got to treat virtual worlds as a new media – rather than say as an extension of the web. They are not 3D web sites (which do also exist, but fail one or more of the above definitions).

Instead virtual worlds are all about the social experience and social interaction. One avatar on its own is likely to have a boring time in a virtual world. Two or more avatars can interact, talk to each other, share ideas and comment, have joint experiences and develop relationships. This also means that virtual worlds tend to be synchronous – they need people to be logged in at the same time to be truly effective.

The key distinction between virtual worlds and the web, is that the web is about information and transactions. These activities do not (currently) work well in virtual worlds. In fact the reason why many business presences fail in virtual worlds is because they are about information, not experience. Indeed our rule-of-thumb is that if something is working well on the web there is good chance that it won't work well in a virtual world. Indeed the opportunities for virtual worlds probably lie in those things that do not work well on the web.

It is also useful to think of virtual worlds as a meta-medium, rather than just a medium. This is because we cannot send a single message in a single way using a virtual world – we have no “voice of god”. Instead within a virtual world you can find almost all of the existing media (including TV, radio, billboards, direct mail, field sales, the web, IM and email and even print). You need to approach a virtual world in the same way that you do the real world. Virtual worlds are in many way the real world – only digital.

World versus Platform

An absolutely key distinction is between a virtual world, and a virtual world platform. Much of the resistance we encounter when talking to clients is due to a failure to grasp (or communicate) this distinction.

For instance Second Life is, traditionally, a virtual world. Everyone in Second Life shares the same experience – although that experience will vary from island to island. Everyone is living in the same world. Because that world as a whole contains elements of the sex industry, gambling, role-playing many businesses users feel that it is not the right place for them to be – although of course the real world has these too. In a virtual world you as a business have little or no control over the whole experience – you can only control (and then sometimes to a limited extent) what happens on your land.

In contrast virtual world platforms (such as Olive, Multiverse and the emerging Second Life Grid) give you, the owner, complete control. You can define the extent of the world, who has access to it, and what is allowed within the world. If you want to make it a complete 100% branded experience you can do. If you want to make it all about free expression and creativity you can do that too. You are in control.

Naturally this model has significant attractions, although those must be balanced by both the higher cost of creating such a world (even on a small scale), and the fact that it will be completely up to you to generate the users (there will be no “passing trade”. At present it has tended to be the biggest players (BBC, Disney, Sony etc) that have gone down this route, but the price-point is now low enough for most mid-sized companies to get involved.

These differences are summarised in the table overleaf.

Feature	Virtual World	Virtual World Platform
Experience	Common	Bespoke
Audience	Large	What you create
Access Control	Good	Total
Avatar Appearance	No Control	Total Control
Trusted Identity	Minimal	Full (if required)
Brand Control	None	Total
Neighbour Control	Minimal	No neighbours
Customisation	Limited, but often high flexibility	Extensive (but at cost)
Servers	Hosted	Hosted or local
Client	Usually branded to World	Own brand
Startup costs	£2k - £20k+	£50k - £100k+
Examples	Second Life There Sony Home	Second Life Grid Olive Multiverse

Glossary

AI – Artificial Intelligence

Avatar - A 2D or pseudo-3D representation of a person or character

Flash - A programme for creating dynamic 2D and 3D graphics on the web

RL – real life

RW – real world

SL – Second Life

VW – Virtual world

"When you can make real money by selling virtual property in Second Life, the boundaries between the two worlds start to blur"

"We'll remember the decade from 2000 as the time when it stopped making sense to think of the Internet as an 'information superhighway', or even as a 'parallel universe', because it became just another way, albeit a staggeringly powerful one, of being human"

– Guardian, Jan 2008

The bottom line is that actually organisations will want to be active in both environments. They will want to be involved in virtual worlds due to the high numbers of users they attract (and the relative cheapness and openness of development), but they may also want a private world based on a virtual world platform for their own internal use, or for their own branded experiences.

And don't confuse World and Platform with Public and Private. Whilst a World will almost always be Public (although with possible membership conditions), a Platform can be used to create either a Public or Private world.

Finally bear in mind the difference between Application-based Worlds and Browser-based Worlds. The former will require the user to download and install (and probably update) an application in order to access the world (e.g. Second Life, There). The latter will run in an ordinary web browser (usually needing Flash) (e.g. Runescape, Club Penguin etc). Naturally consumer worlds, and especially those aimed at kids tend to keep things simple and be browser based – but this will be at the cost of fidelity and sophistication.

The 9 Point Virtual Worlds Business Plan

Any organisation thinking about using virtual worlds should have a clear plan that covers what it wants to do, why it wants to do it, and how it expects to do it. We summarise this with our 9 Point Plan:

- What's The Business Benefit (or why get involved and what do you want to get out of it)
- Who's the audience?
- What are the constraints?
- Which world?
- What's the engagement model?
- How are you going to implement?
- How are you going to market?
- How are you going to manage visitors?
- How are you going to manage long term?

1. What's the Business Benefit?

The key aim of this paper is to show how businesses can actually use virtual worlds for real business advantage. Since 2006 we have identified a dozen key ways in which organisations are using virtual worlds for real value. These are:

Aim/Business Benefit	Description	Success Measure
Learning about the medium	The most honest reason for getting involved in virtual worlds is to learn about them. Some commentators consider that they are 5 – 10 years away from becoming a truly mainstream technology, but the companies that engage now, and make their mistakes whilst not many are watching, will be well placed when the technology really does become mass-market.	More effective spend and less wasted cost later. Faster to market once the mass-market really opens
Generic Brand Building	Using your activities to build awareness of your brand either in the virtual world, or (more likely) in the real world.	Column centimetres of positive coverage in press, media and blogs
Internal/Partner Communications and Collaboration	Creating better at-a-distance meetings than existing audio, video or web solutions. Often based around a private world or space.	Participant feedback and take-up. Better decisions. Greener meetings (less travel time/CO2/cost etc)
Training and eLearning	Delivering training and education, either through distance learning style courses, or immersive simulations	Better trained staff
Recruitment	Meeting potential staff virtually before any face-to-face meeting.	Better recruitment. Saved costs and greener recruitment.
CSR	Improved CSR image for the organisation, e.g. through supporting charities and communities by helping them set up in a virtual world/	CSR rating (e.g. London Benchmark). PR coverage. Stakeholder respect.
Environment	Reducing the business carbon footprint and resource consumption and waste production through more use of remote working	Improved environmental measures
Diversity	Widening workforce participation and diversity through easier support for home-workers and those with disabilities	Diversity measures
Information Visualisation	Visualising complex data with a shared, immersive 3D environment in order to improve understanding and analysis	Better business decisions
New Concept Development	Use the 3D space to both create 3D models and also hold focus groups etc	Better products
Service Delivery, inc Support	Support transactional and support activities, particularly where the latter can offer a half-way house between call-centres and face-to-face engagement	Happier customers
Revenue Generation	Sell products and services both in the real and virtual world	Increased revenues and/or reduced cost of sale

In planning your presence you need to decide which of these is your primary aim, and which are secondary aims.

The sidebars will give you case studies of real world businesses who are making use of virtual worlds in many of these ways. In many cases a single virtual world activity will cover more than one of these use/benefit models.

Case Study - IBM



IBM set up in Second Life early, but interestingly they kept their presence there private. Through blogs though news started to leak out about the work they were doing (e.g. replaying Wimbledon tennis matches) and the way that it was being used to promote communication and collaboration between IBM staff across the globe. By the time that IBM opened up their archipelago to the public, they had already won over most SL residents to their side.

The archipelago covers over 20 islands (see map above), with many IBM business units taking islands to promote their own activities both within and without IBM, and to use them as test-beds for client focused work (e.g. the Sears demo). We also know that IBM is working on their own virtual world platform, principally as a research tool. It is not yet known whether they will make it commercially available. There is though no doubt that IBM is taking virtual worlds very seriously indeed.

2. Who's the audience?

Having decided on an aim we need to identify the audience (or audiences) we are aiming at. If our activities are internally focussed then considerations will include the relevant departments, divisions, roles and levels (Executives to customer facing staff). If a B2B organisation then we need to consider both which sectors (and sub-sectors), and who within the organisation. If B2C then its about demographics – age, education, access to PCs etc.

In all of these a key concern will be about both access to our chosen virtual worlds (are firewalls an issue), and familiarity with virtual worlds, or the wider sphere of computer games – especially first-person ones.

3. What are the constraints?

Any project is likely to bring its own constraints. These will have a major impact when it comes to our choice of world. Typical constraints may include:

- Budget
- Time available
- Security concerns
- Regulatory issues
- Access issues (e.g. Firewalls)
- Computer platform limitations (e.g. Graphics cards, sound etc)

It is important to identify these constraints BEFORE you choose your world.

4. Which world?

This is potentially the most important decision. Get this wrong and much of the project spend may be wasted. However these are early days, and so it may be that you need to factor in a 2 stage approach – doing your initial proof-of-concept in one world, and then being prepared to move to another for an operational system.

The key factors driving the decision will be:

- Is it to be private or public?
- Do you want to be part of an existing World or have your own Platform?
- If a public World, where is your audience?

This will then be modified by issues like budget and security.

Only once you have specified the *type* of world/platform should you really start assessing the options available. (see sidebar)

A-Z of Who's in Virtual Worlds

Here's a quick name-check of some of the Brands and organisations who are already using Second Life or another virtual world:

20th Century Fox, ABN Amro, Adidas, Amazon, BBC, BMW, Calvin Klein, Channel 4, Cisco, Coventry University, Edinburgh University, Guardian, Harvard, ING, Mazda, Mercedes, Microsoft, MTV, NASA, Nissan, PA Consulting, Reebok, Reuters, SAP, Sears, Sony, Sun, Swedish Embassy, Toyota, UK Government, US Government, Visa, Vodafone, Weather Channel

World Choices

These are the most obvious choices when it comes to worlds and platforms, but be aware that new ones are launching every month – especially in the browser consumer space.

Platforms

Second Life Grid
Forterra's Olive
Multiverse
Qwaq
Protosphere
Areae's Metaplace
Sun's Darkstar

Worlds

Second Life
There
Kaneva
Sony Home (PS3 only)
Habbo Hotel*
Club Penguin*

Worlds marked * are browser based, others are downloadable applications

5. What's the engagement model?

If you are building a world for internal use then the engagement model will probably flow from the intended business benefit. For external use though – and particularly the marketing led options – you need to think about how you are going to engage with the world and its inhabitants. We typically identify 8 main approaches:

- **Inward looking** - *"look at us"* - generally not a good idea unless you really are worth looking at. This stuff is best left to the web (e.g. Cisco, ABN Amro and many others).
- **Events** - *"look now"* - don't worry about being there the whole time, just base your work around events, which could last from hours to months (e.g. BBC, CSI:NY)
- **Education** - *"did you know that"* - virtual worlds are ideal for informal education, and visualising ideas, processes, places and things (e.g. NASA, Weather Channel)
- **Facilitation** - *"look at them"* - use your money and contacts to make it easier for existing residents or charities to do things, which will in turn reflect well on you (e.g. Pontiac's Motorati Island, Talis and Cybary City)
- **Objects** - *"look at this"* - make something that will be of use to residents in their own use of the virtual world (e.g. Reuter's RSS Display)
- **Services** - *"let's help you"* - providing in and out world services that make people virtual and real lives easier (e.g. BlogHUD)
- **Games** - *"let's have fun"* - creating games and experiences that people can just enjoy (e.g. CSI:NY, Tringo)
- **Private Presence** - *"don't look!"* - creating a presence which is off-limits to ordinary residents, but which may in time be opened up in part or whole (e.g. IBM)

Of course some engagements may use several of these models at the same time, or even move from one to another.

6. How are you going to implement?

Having decided what you want to do, the next step is to decide how you are going to do it.

There are two main choices, and again in some cases a combination may apply:

- Build or recruit the skills to do it in-house
- Retain a virtual worlds agency (such as ourselves of course!)

Doing it in house may add time, and there is a big difference between having the basic building and programming skills to create in a virtual world, and understanding all the technical, social and even artistic issues involved in virtual world content creation. Outsourcing everything of course will need a better specification at the start, and may initially cost more – although that depends on how efficiently you can manage your internal staff.

One route we are more than happy to investigate is that of skills transfer. Daden will do some or all of the initial build, but give your own

Case Study – Pontiac



Most car companies entering Second Life have taken a “model car” approach. Nissan, Toyota, Mazda all created islands where you could buy, or be given, a car based on a current RL model, and then drive it around their islands, or the (few) roads in SL.

The only problem was that SL physics is dreadful when it comes to handling wheeled vehicles, and driving a car in SL has always sucked (in contrast to “There” a virtual world where driving a dune-buggy is great fun!). Hardly surprisingly these locations have not been a great success.

In contrast Pontiac took a “facilitation” approach. They bought an island, put in a basic road system, but then opened it up to any SL residents with an interest in “car-culture” to create whatever they wanted.

The end result is a busy area with drive-ins, road side diners, garages and car showrooms, and an active community promoting the Pontiac presence – at minimal cost to Pontiac.

staff enough knowledge to cope with some of the day to day management and maintenance tasks – in the same way that you would with a web site Content Management System.

7. How are you going to market?

As with the web, there does tend to be a “build it and they will come” attitude to virtual worlds. In reality (!) you need to market the presence in the same way that you would any real-world initiative. We identify three main marketing spaces which need to be considered:

- In-world, using the worlds own tools (e.g. Search, Classifieds, Maps, Splash-screens), in-world objects (e.g. billboards, notecards, advertising drones), and in-world word of mouth and PR to get your message out
- Eco-system, using the blogs, web sites, electronic newspapers, podcasts and resident mailing lists to spread the word in both the real and virtual worlds
- Real world, using mainstream media (web, print, audio, video, PR) to reach the largest audience

Just like any marketing campaign this ideally needs budget, time and resources.

8. How are you going to manage visitors?

Whilst many brands have got to grips with marketing their presence, many still fail on this one – just how do you manage visitors to your virtual presence. Whilst most will log every visitor, and many may have a simple greeter script running (something that typically just says “Welcome X, please have a look around”), very few have more than this. We find that there are two main options to improve your visitor handling, and they can be used separately, or in parallel.

- **Human Management:** This can be expensive if you have a member of staff assigned 24/7 to staff your virtual presence (and remember that “office hours” means very little in a global community). We would also not recommend that real-life brands recruit “local talent” to staff their office, except under the same HR conditions as they would for an RL employees. Instead we think that the best solution is to combine some limited in-world “clinic” time with a virtual-to-real-world alerting and chat system. For instance we can deploy a system which:
 - Sends your call centre or support staff an IM or email message whenever someone arrives
 - Supplements this with an audio announcement of the name of each visitor, even with additional information about their past visit (and activity history)
 - Allows your staff to talk “into” the virtual world using text chat or audio, letting them converse with visitors without having to run up a full virtual world client (so getting round many desktop and firewall issues)
- **Agent Management:** By combining our expertise in virtual worlds with our long knowledge and experience of conversational agents (also sometimes called chatbots, or even “artificial intelligences”) we can create objects or even full avatars within a virtual world which can act as virtual receptionists and virtual support staff. They can be programmed to both ask and answer questions, guide visitors to particular locations, hand out objects and information, and

Case Study - American Apparel



American Apparel (a Gap look-a-like) created probably the first RL branded virtual retail store in Second Life. Avatars could click on t-shirts and chinos and either buy them for their avatars, or be linked out to the web site to buy them for real.

A year later the shop was closed. Why?:

- Most avatars want something flashier and more stylish (and even outrageous) than t-shirts and chinos
- The link to the web from SL is cumbersome and breaks the "illusion" of the virtual world.
- There was never anyone from American Apparel there
- There was nothing to do there but shop

Hardly surprisingly sales were low, and as there was nothing else to do but shop, and no-one to talk to, people stopped coming.

log every aspect of the interaction. Since our agent technology is web based you can even put the same agent on your web site or in multiple worlds, ensuring a consistent visitor experience. Properly programmed the agent can initially be made indistinguishable from a human controlled avatar.

These two approaches can be combined in several ways. For instance you can deploy an agent in your location to have the initial conversations with visitors, but have the agent monitor how well it is doing and when it starts having problems replying to questions it can alert a real-world member of staff to take over – potentially all without the visitor realising that they have gone from speaking to a computer to speaking to a human!

9. How are you going to manage long term?

Your final challenge is working out how you are going to maintain your presence once you've got it established. Again this is an area where many early, and even current, corporate presences in virtual worlds have failed. We identify 3 main areas:

- **Estate and/or World Management** – keeping your servers and virtual world space up and running and secure. This includes making backups (where possible), optimising performance, controlling access (including measures against hackers and griefers - in world vandals - and any other uninvited guests), and managing recovery after crashes.
- **Facilities Management** – ensuring that your space is kept clean, tidy and functional. Even in a virtual world its surprising how quickly things can get messy and break down!
- **Presence Management** – Keeping your content fresh by both reflecting seasonal changes (snow in winter) and festivals (pumpkins at Halloween), and creating new content and new events to keep visitors coming back.

All of these could be managed in-house, or outsourced to a virtual worlds agency (like Daden!).

Against this monthly support plan you also need some sort of longer term development strategy. Just as we are used to rebuilding web sites every few years, so too you should expect to rebuild your virtual world presence every couple of years. Indeed initially you may want to rebuild after only a year to incorporate the lessons you have learnt. If you initial presence was very much a pilot a project then this second build may even take place in another world, or on another platform.

And remember, virtual worlds are a whole medium, so expect to have presences in several virtual worlds as this space evolves and grows.

Case Study – Diageo



Diageo is of interest as being one of the first non-tech companies to get heavily involved in using Second Life for its own internal communications. The initial project has been to create an intra-world which can be used to support the global marketing function – allowing them to reduce the number of global meetings they have each year – and so saving on cost, time and CO2.

The virtual work space is on a private Second Life island, and is integrated with the web, so that users can view Powerpoint and RSS feeds, and can export meeting notes and brainstorming to the Intranet.

Advantage has also been taken of the virtual nature of the world, so that different meeting environments from board-room and futuristic to bean-bags and deck-chairs can be summoned up at the touch of a button.

"80% of active Internet users (and Global 500 companies) will have a 'second life' in a virtual world by 2011"

– Gartner, Apr 2007

Conclusions

Virtual worlds are at an early-stage in their development, but all the indications are that they will become more and more important over the coming decades. The organisations which engage now and make their mistakes whilst (relatively) few people are watching, and capture mind-share whilst there is little good competition will be well placed to capitalise on this technology as it enters the mainstream.

And just as the Web led rapidly to Intranets, so too are virtual worlds leading to Intra-Worlds. Indeed for many organisations a private virtual world to support remote communications and collaboration, eLearning and eTraining may actually be a more justifiable step than running a virtual world based marketing campaign.

As with almost all Internet undertakings though the costs of getting involved are low, and relatively risk-free. The important thing is that you should start learning about and experiencing virtual worlds now, and work out not only how they can help you with your organisation, but also how they might effect your organisation and sector in the future.

Who are We?

Daden Limited is virtual worlds agency based in Birmingham, UK. We have been working with avatar and virtual world technology for almost 10 years. We have built environments in several virtual worlds, and also developed interfaces between virtual and real environments. We have a deep understanding of the possibilities offered by new technologies, but with good understanding of the marketing and usability issues to know what might work, and what won't.

We have worked on strategy, marketing and technology projects for a variety of companies and organisations including FTSE100, hi-tech start-ups, and public sector organisations, in the UK and abroad.

If you think that we can help you understand virtual worlds a little bit better, or even help you take your first steps into virtual commerce then please contact us:

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