

## TECHNOLOGY ASSESSMENT: User-Created Content Hype, or sustainable business model?

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### Introduction

Whether one believes the media frenzy and hype around Web 2.0, by now it's clear that successful online businesses are emerging that harness the power of collective intelligence and creativity. A key component of these new business models is User-Created Content (UCC, sometimes called User-Generated Content, or UGC), a kind of "new media" created and cultivated by end-users. This kind of new media most obviously breaks from traditional modes of production in which content is created and made available to customers by a single company.

The most visited websites in the world harness UCC in some form.<sup>1</sup> YouTube, which allows users to upload and share content with each other, ranks 4th in most visited pages (8% of all global internet users visit YouTube each day). MySpace, ranked 5th, is built on user-created home pages that allow them to share music samples and personal profile information. A look down the list of top 20 includes a variety of UCC sites such as Wikipedia, Blogger, hi5, Sohu, and Megaupload.

Clearly, these sites generate an incredible number of page views per day from a diverse, global audience. According to In-Stat, a communications market research firm, "by 2010, the volume of downloads/views on these sites will surpass 65 billion, and revenues tied to UCC video are expected to exceed \$850 million by 2010."<sup>2</sup>

Many UCC sites offer free services to end-users. This eliminates the costs of content creation, but raises a new set of costs related to content curation, hosting, and support.

This technology assessment looks at ways companies are creating sustainable business models around UCC. Additionally, we explore how content-creators are also participating in the business process. We examine several kinds of user-created content in the context of the business models that support them, including audio (podcast and music), video, news, journalism (blogs), wiki's, and photos. We find that these business models come in old and new forms, from employed writers who write corporate PR in blog form, to online micropayments to content creators based on pay-per-click models.

At the highest level we found the following business models around user-created content:

***Ad-Supported (plain advertising):*** TechCrunch generates over \$120K per month from sponsor ads shown in banner form. Revver, a video sharing site, does similarly.

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1 Statistics from Alexa, accessed March 10, 2007

2 <http://www.content-wire.com/FreshPicks/Index.cfm?ccs=86&cs=4310>

***Ad-Supported (contextual advertising):*** Most notably AdSense, but other sites that employ contextual ads include SixApart (Typepad, Moveable Type) in partnership with Kanoodle, AdVolcano, and BlogKits.

***Subscription Based:*** Basic accounts are generally offered for free, but premium services such as unlimited webspace require a paid subscription. Some companies such as Smumug, a photo sharing website, only offer subscription based accounts offering a guarantee of higher quality and more reliable service with no ads to clutter your galleries.

***Complementary Products:*** Marrying user created content with products is probably the most effective form of contextual advertising. A significant portion of photo sharing websites offer digital prints as well as personalized merchandise such as picture mugs and calendars.

***Direct Payment (per article basis):*** PayPerPost linking bloggers with companies looking for positive / negative reviews (companies can specify how much they are willing to pay, around \$10 per post). Another example is ReviewMe, which brings bloggers and advertisers together (bloggers review ad content, ad companies pay bloggers).

***Direct Payment (employee):*** This includes employed bloggers such as bloggers hired by political campaigns, or Robert Scoble being hired by Microsoft to be their technical evangelist. Another example is where a company supports community content (corporate blogs) whose cost is absorbed by the company.

***Revenue Sharing with E-Commerce Sites:*** SixApart's VOX partnership with Amazon has a model which shares 7% or revenue share when users click on images and purchase them. YouTube (now under Google) is looking at ways to compensate users for content based on a similar micropayment scheme.<sup>3</sup>

***Supporting Existing Print Revenue Stream:*** The Wall Street Journal, NY Times for example, have their own bloggers.

***Charge for mobile access.*** Licensing of user content to partners, Verizon is paying Revver and YouTube to be able to show their users' content on mobile phones, Licensing of technology platform (which is built/trained on UCC) to partners.

The proceeding sections review podcasting, video, images/photos, print (collaborative), and print (non-collaborative). We analyze the business models, issues that might be inherent in the model or content and predict the sustainable business model for each type of content. We summarize our findings at the end by looking at some of the weakness in these models and predictions for the future growth of UCC.

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<sup>3</sup> <http://blogs.zdnet.com/social/?p=75>

## **Podcasting**

The advent of podcasting parallels the proliferation of the iPod and other personal music players. It combines RSS (Really Simple Syndication) technology and audio content, allowing users to subscribe to audio content using RSS, which enables the music to be pulled into the music device or to software on a users computer (which is then used to load into a music device). According to a Pew survey in 2005, "more than 22 million American adults own iPods or MP3 players and 29% of them have downloaded podcasts from the Web so that they could listen to audio files at a time of their choosing. That amounts to more than 6 million adults...."<sup>4</sup>

## **Business Models**

Several potential business models have been proposed for podcasting.

***Sponsorship:*** Corporate sponsorship is a reasonable business model for popular podcasts. The marketer can readily assess the impact of a podcast sponsorship with an increase in (virtual) store traffic and sales. In addition, sponsorship can permit the podcaster to send a consistent product or brand message, which may be less annoying than advertisements.

Well-matched sponsorships can generate positive interest for the sponsor and the podcast. An example is that of Durex' sponsorship of a married-couple's advice podcast.

Sponsors may also choose to underwrite the expenses of a particular account. For example, some podcasters arrange for sponsorship of bandwidth fees. This is a sensible arrangement whereby the podcasters are permitted to grow at zero marginal cost, while the sponsor pays in accordance with the variability of the audience size.

This model will not work for unestablished, independent podcasters. The transaction costs of establishing sponsorships are very high, especially for medium-to-small podcasters. Sponsorship entails assigning brand or product identity to a podcast. This could blur the ostensible independence of the podcaster from corporate interests, and potentially alienate listeners.

***Advertisement:*** Advertising for the podcast format suffers from the same disadvantages as the sponsorship model. The disadvantages are especially acute for independent podcasters. Podcasting has generally been viewed as a way to produce, distribute, and listen to content independent of the broadcast radio machinery. Unfortunately, advertising reintroduces the most vilified vestige of the traditional radio medium: obtrusive interruptions which the listeners may feel is a penalty for listening to the content.

In addition, advertisements suffer from poor metric availability. Listeners are free to skip advertisements at leisure since control of the podcast player is often divorced from the content. There is also a lack of standard measuring infrastructure to map a podcast's circulation and demographics. This further hinders the marrying of ads with podcasts.

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<sup>4</sup> [http://www.pewinternet.org/PPF/r/194/report\\_display.asp](http://www.pewinternet.org/PPF/r/194/report_display.asp)

Lastly, circulation, even if it were measurable, is projected to be low, especially for independent podcasters. Podcasters have argued for quality vs. quantity of the audience, but many marketers still regard the majority of podcasts as too small to attract advertising dollars.

Advertising tends to work better for established broadcast radio content owners who have targeted audiences already comfortable with the advertising present in the alternative medium. In addition, the content owner already has an established ad agency through which to sell ads.

**Donations:** Donations are questionable especially with regards to sustainability. Donations generally flow toward the most prominent organizations (e.g. Red Cross, United Way) and smaller podcasters are hard-pressed to accumulate enough donations to realize sustainability. In addition, listeners have substantially dampened social incentive due to dissipation of personal responsibility known as the free-rider problem.

**Cooption:** For established content producers and syndicators, podcasts might easily be used to promote the traditional broadcast home site. This, in effect, is using the podcast as a driver for the core business, traditional broadcast. The benefit to the listeners is temporal-independence.

**Per-episode payment:** This model involves individual payment per downloaded podcast. While quantitative data are scarce, several early and well-established podcasters have indicated this is viable. However, the problem is again that credibility is difficult to establish independent of a preexisting traditional media brand. In order to promote the viability of this approach, at least one podcaster has even suggested permitting listeners to return purchased content if dissatisfied.

The per-episode payment model is likely to work well if content is well-indexed such that potential purchasers can easily identify the value of episodes. Also, a significant issue is that podcasts tend to be short (under 10 minutes) and so the transaction costs of a per-episode payment are very significant relative to the cost of the product.

In other countries such as South Korea, the pay-per-episode model has worked for T.V. Series episodes hosted online. In these cases, an established content producer was willing to experiment with a different channel.

**Subscriptions:** The subscription model has also been advocated, but its viability is very questionable, especially for individual podcasters. Subscription services tend to rely heavily on initial brand/podcaster reputation. Unfortunately, this is again very difficult to establish for medium-small podcasters.

**Springboard:** Several sources have suggested podcasting's ultimate role is as a talent filtering mechanism, presumably for promoting successful podcasters to a more mainstream medium such as broadcast radio. However, this model significantly understates the benefits of the long-tail: there are topics relevant to enough people to warrant production for the Internet but not for broadcast.

## Issues

Several issues complicate the business model landscape for podcasting.

*Lack of metrics:* Due to the current distribution infrastructure for podcasts (embedded audio in RSS feeds), the accounting necessary for a pay-per-impression or pay-per-click advertising model is difficult to realize. Potentially podcast aggregators might be able to arbitrate this process if they are the rendezvous for listeners and podcasters. However, under any sort of podcaster/aggregator revenue-sharing arrangement, the aggregator then has incentive to artificially increase the download count of podcasts. However, trusted self-reports of podcast downloads is the state-of-the-art.

*Consumer acceptance:* Both sponsorship- and advertisement-driven business models tend to have low acceptability for listeners because of their relationships to traditional media. However, as the field matures and more mainstream listeners adopt podcasting, these forms of advertising may become more acceptable.

*Small audiences:* A fundamental problem with podcasting is that it is not clear how much appeal a particular podcast has. Again, data from self-reports are not reliable.

## Outlook

Making a living off of podcasting for medium to small podcasters remains elusive. Anecdotally, many podcasters still hold on to their day jobs. We suspect that the best players to take advantage of podcasts will be traditional media establishments and podcast aggregators. NPR provides a good example of the former.

In 2005, NPR made the transition to use podcasting as a means for talent incubation and topic exploration. NPR has aired programs that previously did not appeal to a wide-enough audience on broadcast, such as new music channels, gambling commentary and young producer talent reviews. In each of these scenarios, NPR also applied different business models, from revenue-sharing to freelance contracts to production partnering.

At the same time, because NPR has an established brand, it was able to consistently attract a large audience to its podcasts. This established link with broadcast radio further permitted traditional business models such as advertising and sponsorship, for which the listeners were already prepared.

Industry analysts have also suggested that existing podcast indices such as iTunes, which already serve as aggregators, are well-positioned to establish consumer payment based models. This provides some buffer against individual podcasts' variation in quality over time. For example, iTunes might assume the role of a traditional radio programmer, serving as the rendezvous point for all three of: podcast content, advertisers and listeners.

## **Video**

### **Business Models**

**Advertising:** This is the major source of revenue in the user-created video market. On video websites, standard text-based ads can be placed alongside videos. These ads are often context-relevant, and placed based on the surrounding webpage and basic video metadata (such as title and user-generated tags). In other cases, sponsors can buy ad space next to popular videos. Also, some sites have begun to stream ads right in the same video box as the user-generated videos. For instance, ads can be mandatory views before the user views a free video. In other cases, the last frame of a video is a still advertisement.

**Content Licensing:** Because the terms of service of video sites often give the online provider control over the content, websites can license the use of user-generated videos to other providers, such as mobile phone companies.

**Synergy with E-Commerce:** Some sites have attempted to pair user-created videos with commercial videos on their sites. Oftentimes, they will sell the traditional videos for a small fee, but offer related or similar user-created videos at a cheaper price, sometimes for free.

**Subscription:** Some sites offer advanced services and access for users who pay a subscription fee. One major arena in which this happens is the realm of video-editing sites. These sites offer users the ability to edit their videos online. However, oftentimes, storage, advanced features and other special treatment comes with a fee.

**Technology Licensing:** Some sites build out infrastructure that is designed to help users upload and share video with others. However, oftentimes these systems get to a point at which big companies want to license the technology for other users.

**Revenue Sharing with Users:** To make the wheels turn, sites are offering incentives for users to create content and bring more users to the fold. This isn't a business model per se, but instead lubricates the process for the others mentioned.

### **Issues**

There is a big question looming over the user-created video space: why is revenue lagging so far behind views? YouTube is the fourth highest trafficked website in the world and still has not developed a solid business model to monetize all their traffic.

Another major issue is user-uploaded content that infringes on copyright. YouTube came to prominence due to a handful of high-profile, but copyright-violating videos, such as the SNL skit "Lazy Sunday." At this time, the onus has been on the copyright-holder, and YouTube's search mechanism is widely known to be ill-suited for finding each and every violation.

This leads to another major issue in the space of user-created video: how to search, sort for

quality, genre, and other facets? At this time, there is limited metadata, and thus limited ability to select based on important criteria. It's hard to pick high-quality content, content tailored to a user's preferences and past behavior, or content that pairs well with a given advertisement. As the industry matures and authors of successful videos become more experienced, professional quality user generated content may become more readily available solving some quality issues. Given the high traffic rates, it would not be a surprise if more traditional media conglomerates begin to play a role on these sites and set new standards. The low distribution cost and highly targeted market may be well suited for testing ideas and introducing new talent.

Another pitfall in user-created video is the over-reliance on "viral" videos, which cause unpredictable and spiky traffic, which is not good for advertisers. Many sites have relied on these "viral" videos, one-offs that are entertaining. But to make a more coherent brand and advertising market, many sites are beginning to make partnerships with highly talented user-creators to make recurring shows.

Giving users money to create content may show a "crowding-out" effect. As the YouTube founders have expressed, they do not want a "culture of greed."

## Outlook

There is no shortage of creativity within the user populace, so the amount of video content being shot flows freely. As mobile phones increasingly bundle video cameras, and as the software for editing video comes down in price and accessibility, the future of the content looks bright.

Deep tagging and hypervideo are future ideas that will allow video content to have better metadata and interconnection with other content. For instance, having "deep tags" about a given video can tell you that a certain video is about basketball, and that there is an alley-oop dunk at 5:35. This information can give rise to a whole new level of relevant advertising placement. Hypervideo is the notion that you can click on a bottle of Coke in a video and go to other videos about Coke. Product placement can be a much richer, more compelling proposition, for both advertiser and consumer, once linking structures are in place. Celebrity shoes will directly lead to shoe sites, giving rise to new notions of what relevance is in a video clip.

## Examples and further discussion

Revver is a video-hosting and sharing website that has pushed the business model to the forefront, by focusing on incentives for the creator. The big thing is that they share *half* of all revenues with content creators. Revver ads are placed in the last frame of the video. These last-frame ads are similar to Google ads, they are clickable, and advertisers pay per click. Also, they have struck a deal with Verizon to make Revver videos available on phones; here, there is no ad placed, but the revenue per video impression from Verizon will, again, be split 50/50 between Revver and creator. As with Google ads, content creators and advertisers specify preferences about what types of ads are placed on various types of videos. Affiliate accounts on Revver pay 20% if a user promotes or shares a video.

Revver is much faster at removing copyrighted content, so that *original* user generated stuff has become the focus of the site; copyrighted material is just not part of the culture of the site (unlike YouTube).

Revver video is flash-based, and they encourage users to embed their player in as many places as possible; ad click-throughs are trackable regardless what context they are viewed from (even on an iPod or on someone's home computer!). One user, who pioneered the Mentos and Coke video meme, has reportedly made \$30k from Revver sharing. Revver, to encourage remixing and mashups, requires creators to post using a Creative Commons license.

Guba is a firm that hosts and sells copyrighted major media video clips, but also gathers videos freely available on Usenet and accepts user-submitted videos too. Guba offers users money not for content, but pay based on the number of new signups they can generate.

In general, user-generated video is viewed for free. Hungryflix.com is an exception, where videos could not be viewed for free. Instead, they want to be a video broker/distributor. They invite creators to sell their videos via their infrastructure, which makes it easy to view UCC on iPods, PSPs, etc.

Some sites like WatchMojo.com seek to be like a studio or a record label, and invite people to join their group to create a conglomeration of good content.

In a direct sponsorship deal, Jumpcut (since acquired by Yahoo!) asked users to remix the “Scanner Darkly” trailers to make new content. Jumpcut also hosted users trying to audition for a movie, the remake of “Revenge of the Nerds.” It's related to the traditional video method of product placement, only you entice users to place the products for you, once a partnership is formed. “The Lot” is a reality TV show that has begun by soliciting user-generated content, and it will invite contestants on based on online voting for their original films.

The porn industry has made user-generated adult content a key differentiating component. Though sites will promote “amateur” material, the underlying business model of these sites is to sell professional adult video, and adult “dating” services. Subscriptions are often offered as well. Xtube treats its uploaders as adult models, who are paid based on views/sales.<sup>5</sup> On the flip side, Pornotube.com is built to support partners, affiliates and studios, and user-generated content is just a differentiator. “For the founders of these sites, it was a no-brainer to build a smart, sex-positive YouTube clone. Steve Jacobs from YuVuTube said, “YouTube clearly missed a trick when they decided not to include adult material, as that is more likely to be monetizable. We started YuVuTu simply because we saw that YouTube and its competitors were staying out of adult. We felt that amateur productions can compete with professional productions far better than in any other genre (sport, comedy, action movies, music videos, etc.), so it's obvious to us that the YouTube model of user-generated content will be most successfully applied to adult content.” Jacobs added, “The jury is still out as to whether YouTube has a viable business model.”

Dabble has struggled to make ad revenue. They offer sorting and indexing of your “favorite”

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<sup>5</sup> <http://r1.xtube.com/AmateurID.php>

videos, but now it wants to offer its video platform as a way to facilitate discussions using video, inviting corporations to pay and use them as means to communicate with enthusiasts and customers.

urFlick allows you to charge a monthly subscription service for your own personal customized channel. It wants to make users feel like they are producers and programmers for their own cable company.

Some services are also seeking to provide relevant video placements for fees. For instance, if you always want to have sports clips on your blog, you can use Magnify.net's service, and Magnify.net will place ads. This is a similar model to Google AdSense.

## **Images/Photos**

Pictures are one of the most effective and easily generated forms of sharing experiences or opinions and hence serve as a perfect medium for UCC. Photo sharing websites, or sites where users can share their digital picture either publicly or privately, have hence grown in popularity and garner a significant portion of online traffic. The first photo sharing sites originated during the mid to late 1990s primarily from services providing online ordering of prints (photo-finishing), but many more came into being during the mid-2000s with the goal of providing permanent and centralized access to a user's photos[1].

## **Business Models**

Photosharing has three main business models or strategies; advertising-supported, photo-finishing, and subscription based.

**Advertisement:** This is the most popular business model that has led to the most successful photosharing websites such as Flickr.com and Fotolog. These sites offer free webspace for users to store and browse pictures. Ad-supported media plays naturally can only be successful as the number of eyes they can attract to their site. So “grow quick fast” has been the most common strategy that has led to a small number of strong players that dominate the market.

**Photo Finishing:** Photo finishing sites use photo sharing as a vehicle to sell prints or other merchandise. Photo finishing sites have primarily been reduced to low-margin low-cost solutions where the name of the game is offering the cheapest print with acceptable quality. New entrants will find a hard time as high volume is necessary to sustain low-cost printing. Aside from prints, online photo companies also sell merchandise like photo mugs, calendars, etc. Shutterfly reports that 61% of its revenue (\$40M) now comes from non-print personalized items like these.

**Subscription:** On the subscription side the general business model is to offer a free low-quality (low capacity) account and then hope for upgrades. With an advertisement driven world, some customers do not want photo galleries to be bastardized by annoying ads and prefer to pay for a service without ads. This model holds a smaller share of the photosharing market and entrants

face a similar challenge of growing the customer base as the free sites do. Photo sharing websites have strong network effects as the act of sharing photos generally brings in new users, hence the websites are only as strong as the number of registered users.

Some notable examples of the above include Flickr.com, where users get free webspace and can browse pictures in a intuitive manner as pictures are categorized and tagged through user-generated folksonomies. Fotolog.com is the oldest and most popular photoblogging community on the web and the third most trafficked social media network on the Internet<sup>[ii]</sup>. Ofoto.com was founded in Berkeley and is one of the photo-finishing websites that offers a range of products ranging from digital prints to personalized mugs and calanders. Finally, Fotki.com is a similar site to Flickr, but offers unlimited space and premium features with paid monthly membership.

## Issues

With lower and lower hard drive costs, a highly competitive market, and an abundance of easily generated user content, photosharing is quickly becoming a commodity, though user interface features currently provide a thin margin for differentiation. Users expect high amounts of storage essentially for free. Also pictures, unlike videos, podcasts, and blogs generally have less global appeal. Content is most valued by close relatives or friends of the content creator, hence the service of sharing pictures among a small group of people is the main value proposition. With no way to differentiate sites based on content, as in podcasting or blogging, the business model starts playing a less significant role as the winning strategy ends up being providing the highest quality while maintaining a profit.

## Outlook

The three business models in photosharing are actually complementary, so most websites are moving to having all three models in place. A free, ad-driven account, a subscription based premium account, and easy integration with photo-finishing services. Some websites such as smugmug are purely subscription based, but most have all three business models in place with a heavier weighting on the model that they originally started out with.

As far as differentiating, photosharing websites need to develop better technology for classifying and organizing pictures and possibly custom tailor websites to specific market segments. Heavy photo sharing users will have different requirements and will also have different time commitments that a casual user such as a parent porting family pictures on a semi-regular basis. Some users may require geotagging, metatagging, and customizing their photos while other simply want to quickly upload an album and send it out to friends. .

## **Print – Collaborative**

The collaborative print segment of UCC is defined by users creating, contributing, or editing text-based content located in one central space. The segment can be subdivided into three branches: contribution, creation and niche collaboration

The first group, collaborative content *contribution*, primarily represented by sites such as Wikipedia and Yahoo! Answers represent a centralized site, where users contribute towards a goal of amassing, refining and editing information. These sites are defined not only by this function but also by their large user base. The large number of users in fact increases the value of the content, for example, through increased accuracy or greater knowledge depth. However, the content itself is almost static: the number of entries, the article depth are naturally limited and predetermined by the target audience.

Second, collaborative content *creation* pertains mostly to sites such as Ohmynews and Newsvine where users report on current events. These sites serve primarily as a central deposit for information. Collaborative editing of other users-contributed content is not central to this segment. Instead the structure of these sites represent an accumulation of information and rating thereof, similar to summing up individual thematically-related blog posts and hosting them under one umbrella. It is important to note that all UCC in this category is necessarily timely and will most likely be associated with an expiration date.

Third, we group collaborative content creation sites with a *niche focus* into their separate category. Sites such as Vox and Livejournal have a content-specific focus and don't necessarily rely on a large user base. Rather the sites' value comes from the proximity of the users to each other. Oftentimes access is restricted to a circle of friends. These niche platforms are also found in non-public settings such as work-place, project-specific collaboration.

## **Business Models**

***Advertising:*** Public content collaboration platforms have mostly relied on advertisement for monetization. Content-sensitive advertising (e.g. AdSense) is particularly popular as it is associated with a higher click-rate than traditional non-contextual advertisement. Branded advertisement, such as prominent banner ads, and site-wide, exclusive branding are another method of revenue generation, but are not yet widespread.

***Sponsored Posts:*** Given the specific nature of some UCC platforms these sites often serve as attractive gateways and thus find corporate sponsorship. For example, IMDB will serve teasers of movies enabling viewers to redirect to the film studio's own webpage. Sponsorship of content may be subtle promotion via, for example, featured articles. Over the past few years, sites that did not disclose sponsorship experienced strong consumer backlash.<sup>6</sup> According to the average revenue for a paid-for post is \$5 for a small blog to \$100 for a premier blog.

***Merchandise Tie-in:*** Additionally, platforms generate revenue by collaborating with an online retailer. For example, on Vox allows users to post their favorite books and music. The platform

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<sup>6</sup> <http://blogaboutyourblog.com/2007/01/20/this-is-not-a-sponsored-post>

then enables viewers to purchase these and other recommended products from Amazon by providing a direct link.<sup>7</sup> Each time a user purchases by way of the UCC platform Amazon will offer a share of the revenue. While such a strategy may not prove profitable for an individual blog, the mass of users on Vox will provide a sufficiently large revenue stream for its owner Six Apart.

**Subscription:** Subscription-based services are uncommon for sites that rely on a large number of participants. However, platforms serving niche segments such as livejournal have successfully implemented low-cost subscription models and have rolled out enhanced features (post via SMS) to entice users to switch. Jason Kottke (kottke.org) was able to raise funds through so-called micro-patrons (\$10-\$40 voluntary donation) to support his site and himself for a year. He later abandoned the model for sponsored ad-placements on his top tier blog.

**Umbrella P&L:** Lastly, collaborative UCC platforms can rely on the parent company's portfolio of products to generate revenue. For example, Yahoo! Answers does not feature prominent advertising. Instead it is designed to entice the user to register with Yahoo! and use other properties.

## Issues

The field of collaborative UCC in the print segment is marked by a high return to critical mass (network effects). Thus, first mover advantage (or first to critical mass) is not to be underestimated when being assessed by potential sponsors. The repercussions are that advertisers may hold off on investing substantially with one portal until it has been declared the leader in his segment. This catch 22 is similar to that of standards where critical mass and self-fulfilling expectations play a critical role.

Collaborative UCC is attractive for several reasons. Its contributors are extremely concentrated and dedicated lending much credibility to a platform. This positive externality could spill over to the sponsor's brand equity by mere association. Further, site wide exclusive branding advertisement, as opposed to context-sensitive advertising, are predicted to generate high interest.<sup>8</sup> Particularly in the segment of collaborative UCC premium branded advertising is expected to generate significant P&L. This is particularly true when analyzing the spillover effects to other product under the same umbrella.<sup>9</sup>

The niche collaborative UCC segment presents an attractive segment to advertisers since such platforms demand a disproportionately high share of time spent by the customer. Returns to merchandise tie-in are potentially large for collaborative sites due to the critical mass that accumulates on these platforms and can serve as a sustainable revenue stream.

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<sup>7</sup> <http://lilia.vox.com/library/book/6a00b8ea0683a7dece00c2252bcecdf219.html>

<sup>8</sup> Deutsche Bank Analyst Report "State of Advertising" 22 June 2006

<sup>9</sup> Discussion with Yahoo! Insights team, March 2007

## Outlook

The leading collaborative UCC sites are beginning to come under attack, which will give advertisers some uncertainty as to their sponsorship of leading UCC sites.<sup>10</sup> Given that scale is particularly important to this segment advertisers may want to hold off on larger investments until a clear winner emerges.

Several strong players have emerged in the niche UCC segment, namely Livejournal and Vox, both owned by Six Apart. These sites are coming increasingly under attack from social networking sites such as Myspace and Facebook where similar functionality exists. The resulting fragmentation will discourage advertisers to sponsor one particular platform other than with commodity (text-based) ads. With the emergence of additional platforms the incumbents will have trouble justifying subscription services, especially under increased pressures of differentiation.

## Print – Non-collaborative

### Background

Blogs (derived from “web log”) are user-generated journals which are maintained online. The term was first popularized by web-journal pioneer Travis Petler, who coined the term on his personal blog while studying at Brown University in September 1997. By October 1998, Open Diary launched and was the first site to include reader comments. Brad Fitzpatrick started LiveJournal in March 1999, and shortly afterwards, Evan Williams and Meg Hourihan launched Blogger.com in August 1999 (which was eventually purchased by Google in February 2003).<sup>11</sup> Currently, an estimated 8% of internet users in the US maintain blogs, while 39% of all internet US users read them.<sup>12</sup>

According the most recent Technorati report on the state of the blogosphere, the the size of the blogosphere doubles every six months. As of August 2006, Technorati tracked over 35 million blogs.<sup>13</sup>

### Business Models

**Advertising:** There are a number of business models used by bloggers to help them monetize their sites. The most common approach used is the sale of advertising space. Really popular blog sites like TechCrunch generate as much as \$120,000 a month from **direct advertising** (banner display ads). TechCrunch is also able to raise money for parties and events from their ad sponsors.<sup>14</sup> For bloggers who don’t have as big of a following (i.e. the majority of bloggers),

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<sup>10</sup> Economist “Fact or Fiction,” March 10 2007

<sup>11</sup> <http://en.wikipedia.org/wiki/Blog>

<sup>12</sup> [http://www.pewinternet.org/PPF/r/186/report\\_display.asp](http://www.pewinternet.org/PPF/r/186/report_display.asp)

<sup>13</sup> <http://www.sifry.com/alerts/archives/000436.html>

<sup>14</sup> <http://online.wsj.com/public/article/SB116244521605611149->

partnerships with ad companies like Typepad's partnership with Kanoodle or Google's AdSense for Content makes it easy for bloggers to monetize their page views with **contextual** ads.<sup>15</sup> Revenue generated can help pay for subscription and hosting fees. The biggest advantage here is that compared to display advertising, the end-users don't have to maintain the relationship with the advertisers themselves (which is prohibitive for all but the biggest bloggers).

**Direct Payment:** As blogging has become a more popular phenomenon, bloggers are now being hired directly by organizations and being compensated for expressing their views. For example, in the upcoming presidential race, almost all candidates are employing bloggers to help with their campaigns. Howard Dean's team hired two prominent left-leaning bloggers (who were eventually forced to resign because their views were too radical for some of his constituents).<sup>16</sup> Big corporations are hiring bloggers to help with their PR image. For example, Microsoft hired prominent blogger Robert Scoble to be their "technical evangelist." And startups like PayPerPost have setup a marketplace environment to help match potential bloggers with companies who are seeking good reviews for their product. PayPerPost allows advertisers to set a minimum price and a minimum number of words for a review.<sup>17</sup> Startup ReviewMe employs a similar concept, but charges a variable price based on the relative "importance" of a blog (based on alexa and technorati rankings).<sup>18</sup>

**Revenue Share:** Finally, some blog services are partnering with ecommerce companies using a revenue share model. For example VOX (which is also owned by SixApart, makers of LiveJournal and Typepad), allows its users who blog about books to pull images of these books from Amazon.com. In exchange, whenever a user reading the blog clicks on the images, they are taken to Amazon.com. If they purchase the book, VOX gets a 7% revenue share.

## Issues and Outlook

Blogs are the most mature of all UCC. Their relevance to the development of the web and the online advertising industry cannot be denied. Corporate blogging, while still underdeveloped and disputed by some companies, is expected to grow in the near term – making corporate sponsorship a sustainable strategy for a certain segment of the blogosphere.

Advertisers still lack an easy way to categorize blogs (in order to place relevant content). While automated solutions like Google AdSense for content exist, there is still a lot of room for improvement to increase ad relevance, especially should advertisers demand to place premium (exclusive) branded advertising. A technological solution that can match advertisers with the overall character of a blog (instead of simply the individual posts) is needed.

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xEEW\_Dh1mMLLs0dtYRdw492SQYE\_20061109.html?mod=blogs

15 [http://www.sixapart.com/typepad/news/2005/06/earnings\\_announ.html](http://www.sixapart.com/typepad/news/2005/06/earnings_announ.html)

16 <http://www.cbsnews.com/blogs/2007/02/14/publiceye/entry2474042.shtml>

17 <http://www.techcrunch.com/2006/10/01/controversial-payperpost-raises-3-million/>

18 <http://www.techcrunch.com/2006/11/09/reviewme-launches-a-better-payperpost/>

## **Summary and Conclusion**

Within the Ecosystem of UCC we've identified several recurring weak points that will need to be addressed to ensure long-term sustainability to this segment. Central to UCC is the platform hosting the content. Due to their nature, UCC platforms have little control over the content, unable to ensure quality or legality thereof. Platforms face low switching costs from the users perspective as they are all developed using similar web2.0 style technology. Low levels of protection of their features, user interface and technology result from the ease of copying these applications. This results in little opportunity to differentiate.

The producers of content face high hurdle rates in that their content is easily copied and distributed elsewhere, adding risk to their revenue stream. Further, the popularity of mash-ups has generated some uncertainty regarding the legality of using copyrighted content. This may cause platforms to disable certain content or make producers shy away in the first place. Foremost we find that producers face great difficulty in rising above the "clutter." Search technology is more than inadequate in all segments.<sup>19</sup> With the growth and proliferation of UCC, we believe, that relying solely on user generated recommendations (for example, Slashdot or Digg) will not be viable. Instead a platform-wide pagerank equivalent will allow users to find the best and most relevant content.

Consumers of UCC have been bombarded with different platforms and will gravitate towards the platform with critical mass and/or search technology. The fragmentation of platforms available to the user will make him shy away from picking and investing time/eyeballs in a favorite. With little platform affinity there exists low willingness to pay endangering the subscription-based business model.

Versioning with a relatively robust free account will hence play a significant role in most successful UCC sites. Premium membership offer perks such as unlimited space or mobile capabilities, while free accounts fuel a significant portion of registered users. Complementary products such as digital prints and personalized merchandise can also serve as a significant revenue stream.

Ultimately, advertising will always play a central role in UCC. We believe that the next generation of advertising, which will make UCC sustainable, is not text-based advertising but premium branded advertising. Such sponsorship, however, requires critical mass or an efficient ad aggregator that can match inventory with demand effectively, customized to the exact preferences of a campaign. This means that an ad is matched not with the page content but with the blogs branded content.

For advertisers the lack of reliable metrics on the efficacy of their campaigns is particularly discouraging. Once the appropriate technology and metrics are established media buyers predict

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<sup>19</sup> In our assessment, Technorati, which dominates blog search, has developed the most complete and "future-proof-ed" their competitive advantage by integrating Technorati-specific tools into blog backends. Feedburner through their RSS-formatting tools has been able to dominate the podcast segment.

the online brand advertising to grow rapidly.<sup>20</sup>

Lack of control over matching ads with content can be a problem. The more niche blogs become, the more advertisers will want their content match with relevant UCC. A secondary problem is when mis-matches occur, such as a revealing breast-implant ad on Barak Obama's blog.

Integration with other products within or outside of a particular network is an ongoing trend for single product platforms (like LiveJournal). Choice of business models for these platforms will be limited by other competitors that give the service away for free (e.g. Facebook).

### **Requirements for sustainability**

A central issue with UCC is the noise to relevance ratio. There are three ways of making content more findable and relevant. In the first example, a company vets content (the way a traditional print editor selects content). For example NPR has a music channel called "All Songs Considered" in which a small corps of programmers select content from user submissions. Yahoo! and Pepsi host "the 9," wherein editors picks out 9 videos to show daily.

A second way to increase relevance of UCC is to harness the power of user tagging and rating systems, similar to Digg or Slashdot's moderation solutions. Third, a technological solution like Page Rank for all types of UCC media could help to automatically bring relevant content to the surface. The jury is still out on whether consumers of UCC will prefer an automated search (similar to Google's pageranks) to a collaborative, manual filtering technique (similar to Yahoo!'s hierarchical directory).

Currently there is no high-level ad broker for UCC content. In traditional advertising, a client might ask for two print ads and three radio ads for a particular product for a particular demographic. In the online market around UCC, there exists no ad broker that aggregates blogs at a meta-level sufficiently for branded advertising to be matched to relevant content. Online advertising companies like aQuantive, ValueClick and 24/7 Right Media currently serve as intermediaries for traditional online inventory but don't offer a lot of ways to embed advertising into UCC.<sup>21</sup> Metrics that show the efficacy of ad brand-building are also needed to evaluate the true value of ads. As a recent Deutsche Bank analyst wrote, "Online brand advertising is young, and is where future growth will be." (Deutsche Bank Analyst Report "State of Advertising" 22 June 2006)

In conclusion, we believe the following revenue models will be sustainable in the medium term: advertising, versioning, complementary products, reputation building. Should the requirements above be developed further and fulfilled, we believe that UCC will develop to emerge as a mature and sustainable component of the online ecosystem.

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20 Deutsche Bank Analyst Report "State of Advertising" 22 June 2006

21 Analysts reports on aQuantive (February 13, 2007), ValueClick (February 13, 2007) from CIBC World Markets.