Why Online Advertising is failing down in the Internet era

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Abstract: For a long time, I've felt somewhat alone in my opinion that advertising on the internet is a horrible business model for most websites. "Pushing a message at a potential customer when it has not been requested and when the consumer is in the midst of something else on the net, will fail as a major revenue source for most internet sites'. The marketer should know that "the internet is not replacing advertising but shattering it, and all the king's horses, all the king's men, and all the creative talent of Madison Avenue cannot put it together again." What do you think? What are viable alternatives to advertising?

Eric Clemons, *Professor of Operations and Information Management at The Wharton School of the University of Pennsylvania. In it, he argues that the Internet shatters all forms of advertising. "The problem is not the medium, the problem is the message, and the fact that it is not trusted, not wanted, and not needed," he writes.*

The internet has become an ongoing emerging source that tends to expand more and more. The growth of this particular media attracts the attention of advertisers as a more productive source to bring in consumers.

A clear advantage consumers have with online advertisement is the control they have over the item, choosing whether to check it out or not.

I. Introduction

Online advertisements may also offer various forms of animation. In its most common use, the term "online advertising" comprises all sorts of banner, e-mail, in-game, and keyword advertising, on platforms such as Facebook, Twitter, or Myspace has received increased relevance. Web-87related advertising has a variety of sites to publicize and reach a niche audience to focus its attention to a specific group. Research has proven that online advertising has given results and is a growing business revenue. For the year 2012, Jupiter research predicted $34.5 billion in US online advertising spending.

The most common ways in which online advertising is purchased are CPM, CPC, and CPA.

CPM (Cost Per Mille) or **CPT (Cost Per Thousand Impressions)** is when advertisers pay for exposure of their message to a specific audience. "Per mille" means per thousand impressions, or loads of an advertisement. However, some impressions may not be counted, such as a reload or internal user action.

CPV (Cost Per Visitor) is when advertisers pay for the delivery of a Targeted Visitor to the advertisers website.

CPV (Cost Per View) is when advertisers pay for each unique user view of an advertisement or website (usually used with pop-ups, pop-unders and interstitial ads).

CPC (Cost Per Click) or **PPC** **(Pay per click)** is when advertisers pay each time a user clicks on their listing and is redirected to their website. They do not actually pay for the listing, but only when the listing is clicked on. This system allows advertising specialists to refine searches and gain information about their market. Under the Pay per click pricing system, advertisers pay for the right to be listed under a series of target rich words that direct relevant traffic to their website, and pay only when someone clicks on their listing which links directly to their website. CPC differs from CPV in that each click is paid for regardless of whether the user makes it to the target site.

CPA (Cost Per Action or **Cost Per Acquisition)** or **PPF (Pay Per Performance)** advertising is performance based and is common in the affiliate marketing sector of the business. In this payment scheme, the publisher takes all the risk of running the ad, and the advertiser pays only for the amount of users who complete a transaction, such as a purchase or sign-up. This model ignores any inefficiency in the sellers web site conversion funnel.

The following are common variants of CPA:

- **CPL (Cost Per Lead)** advertising is identical to CPA advertising and is based on the user completing a form, registering for a newsletter or some other action that the merchant feels will lead to a sale.

- **CPS (Cost Per Sale)**, **PPS (Pay Per Sale)**, or **CPO (Cost Per Order)** advertising is based on each time a sale is made.[4]

- **CPE (Cost Per Engagement)** is a form of Cost Per Action pricing first introduced in March 2008. Differing from cost-per-impression or cost-per-click models, a CPE model means advertising impressions are free and advertisers pay only when a user engages with their specific ad unit. Engagement is defined as a user interacting with an ad in any number of ways.

- **Cost per conversion** Describes the cost of acquiring a customer, typically calculated by dividing the total cost of an ad campaign by the number of conversions. The definition of "Conversion" varies depending on the situation: it is sometimes considered to be a lead, a sale, or a purchase.

II. Why online advertising falling down in the digital world

1. There Must Be *Something* Other Than Advertising:

The expected drop in internet advertising revenues this year was neither unpredictable nor unpredicted, nor was it caused solely by the general recession and the decline in retail sales. Internet advertising will rapidly lose its value and its impact, for reasons that can easily be understood. Traditional advertising simply cannot be carried over to the internet, replacing full-page ads on the back of The New York Times or 30-second spots on the Super Bowl broadcast with pop-ups, banners, click-throughs on side bars. This might be a subject where considerable disagreement is possible, if indeed, pushed ads were still working in traditional media. Mostly they have failed. One newspaper after another is going out of business across the United States, and the ad revenues of traditional print media, even of highly respected magazines, is declining. The ultimate failure of broadcast media advertising is likewise becoming clear.

Pushing a message at a potential customer when it has not been requested and when the consumer is in the midst of something else on the net, will fail as a major revenue source for most internet sites. This is particularly true when the consumer knows that the sponsor of the ad has paid to have this information, which was verified by no one, thrust at him. The net will find monetization models and these will be different from the advertising models used by mass media, just as the models used by mass media were different from the monetization models of theater and sporting events before them. Indeed, there has to be some way to create websites that do other than provide free access to content, some of it proprietary, some of it licensed, and some of it stolen, and funded by advertising.

The idea that content has a price and net applications should find ways to earn a profit without providing free access to other people's content gets explosive reactions; when virtual reality pioneer and tech guru Jaron Lanier suggested in a New York Times Op Ed that authors deserved to be paid for their content he actually received death threats. But other models are possible and several suggestions for alternative forms of monetization are offered below.

2. Advertising will fail:

The internet is the most liberating of all mass media developed to date. It is participatory, like swapping stories around a campfire or attending a renaissance fair. It is not meant solely to push content, in one direction, to a captive audience, the way movies or traditional network television did. It provides the greatest array of entertainment and information, on any subject, with any degree of formality, on demand. And it is the best and the most trusted source of commercial product information on cost, selection, availability, and suitability, using community content, professional reviews and peer reviews.

My basic premise is that the internet is not replacing advertising but shattering it, and all the king's horses, all the king's men, and all the creative talent of Madison Avenue cannot put it together again. To analyze this statement we need a working definition of advertising, and I proposed the following, which is as general as I could make it:

Advertising is using sponsored commercial messages to build a brand and paying to locate these messages where *they will be observed by potential customers performing other activities; these messages describe a product or service, its price or fundamental attributes, where it can be found, its explicit advantages, or the implicit benefits from its use.*

It is frequently argued that the advertising industry will provide sufficient innovation to replace the loss of traditional ads on traditional mass media. Again, my basic premise rejects this, suggesting that simple commercial messages, pushed through whatever medium, in order to reach a potential customer who is in the middle of doing something else, will fail. It's not that we no longer need information to initiate or to complete a transaction; rather, we will no longer need advertising to obtain that information. We will see the information we want, when we want it, from sources that we trust more than paid advertising. We will find out what we need to know, when we want to make a commercial transaction of any kind. The conventional wisdom is that this is exactly what paid search helps us to do, but all too often they are nothing more than a form of misdirection, as I explain further below. Instead, we will use information that we trust, obtained at the time that we want to see it.

Better targeting of ads using individual interests and individual behaviors will ensure that we do not bore or annoy as many people with each ad, but cannot address the trust issue. As for paid search, it is closer to other mechanisms that allow a website to *sell access to potential customers*. It works effectively as a revenue source for Google, of course. But it surely is not replicable for the average content website.

3. Advertising will fail for three reasons:

There are three problems with advertising in any form, whether broadcast or online:

Consumers do not trust advertising. Dan Ariely has demonstrated that messages attributed to a commercial source have much lower credibility and much lower impact on the perception of product quality than the same message attributed to a rating service. Forrester Research has completed studies that show that advertising and company sponsored blogs are the least-trusted source of information on products and services, while recommendations from friends and online reviews from customers are the highest.

Consumers do not want to view advertising. Think of watching network TV news and remember that the commercials on all the major networks are as closely synchronized as possible. Why? If network executives believed we all wanted to see the ads they would be staggered, so that users could channel surf to view the ads; ads are synchronized so that users cannot channel surf to avoid the ads.

And mostly **consumers do not need advertising.** My own research suggests that consumers behave as if they get much of their information about product offerings from the internet, through independent professional rating sites like dpreview.com or community content rating services like Ratebeer.com or TripAdvisor

Yes, both network executives and their ad agencies have noted that we are not watching traditional ads, and they attribute this to the fact that we have moved beyond newspapers, televised network news, and broadcast movies, to video games, iPods, and the internet. Porting ads to a new medium will not solve the three problems noted above. The problem is not the medium, the problem is the message, and the fact that it is not trusted, not wanted, and not needed.

4. Alternative models for monetization are available:

Again, my research suggests that there are three general categories for creating value that can be monetized, including selling real things, selling virtual things, and selling access. Some websites exist solely to sell *real* things. Many of the best-known perform aggregation of demand, so that there will be enough customers to justify stocking and selling items for which there is only limited demand. Amazon is merely the best-known example. Sites like Amazon and Zappos are especially good for long tail items … where else do you go for a copy of the Green Sea of Heaven, Elizabeth T. Gray's magnificent translation of the Ghazals of Hafiz, or for a pair of size 20 basketball shoes? Selling real things online has been studied since the advent of interest in eCommerce and will not be discussed further here. Other websites sell *virtual* things. These activities fall into three categories:

Selling content and information, from digital music to news and information. Some of these sites are funded by subscriptions, like Gartner Research; some are by direct micropayments for purchases, like iTunes; and some currently attempt to fund themselves through advertising, like *Business Week* or *The New York Times*, while still searching for a more effective business model.

Selling experience and participation in a virtual community, including Second Life and World of Warcraft, Facebook and MySpace, Flickr and YouTube, or LinkedIn. Not all of these have found a way to charge for participation.

Selling accessories for virtual communities, like completed homes and stores, furnishings, clothing, and pets in Second Life or characters and accessories that would be difficult to earn in World of Warcraft, although this behavior is generally despised by serious World of Warcraft players.

Finally, some websites create and sell *access* to customers. Again, this can be divided into multiple categories.

Misdirection, or sending customers to web locations other than the ones for which they are searching. This is Google's business model. Monetization of misdirection frequently takes the form of charging companies for keywords and threatening to divert their customers to a competitor if they fail to pay adequately for keywords that the customer is likely to use in searches for the companies' products; that is, misdirection works best when it is threatened rather than actually imposed, and when companies actually do pay the fees demanded for their keywords. Misdirection most frequently takes the form of diverting customers to companies that they do not wish to find, simply because the customer's preferred company underbid. Misdirection also includes misinformation, such as telling a customer that a hotel is sold out when, indeed it is still available, if the hotel has chosen not to pay a promotional fee, and then allowing the guest to choose an alternative property. Misdirection is, regrettably, still a popular business model on the net, although for reasons I explored in an earlier TechCrunch post on Google it seems ultimately to be unsustainable. More significantly from the perspective of this post, it is not scalable; it is not possible for every website to earn its revenue from sponsored search and ultimately at least some of them will need to find an alternative revenue model.

Evaluation, assessment, and validation. The opposite of sending a customer someplace other than where he wants is providing the customer enough information for him to make an informed choice on his own. Recommendations on TripAdvisor.com allow potential guests to evaluate and validate recommendations provided by Hotels.com; not surprisingly, Hotels.com originally owned TripAdvisor, and benefited greatly from it. Since Hotels.com did not attempt to influence or censor TripAdvisor content the website was (and is) trusted and helped put recommendations from Hotels.com at a level of trust comparable to those from an experienced travel agent. There are at present only a few other examples of website symbiosis like this, where community content on one site adds considerable value for another; consider also the relationship between the Beeryard's list of new beers and Ratebeer.com, where clicking on the name of a newly arrived beer at the Beeryard will allow you to examine reviews on Ratebeer.com.

Social search. Social search is a way of tailoring search based on the user's network of friends. Rather than searching for any hotel in Chicago, or for any hotel that paid for the keywords "hotel" and "Chicago" I would like to be able to ask for the hotel where my friends stay when they are in Chicago. This invades no one's privacy, avoids the annoyance of pushing ads at me when I am not searching for something to buy, and provides more relevant results than paid search usually can deliver. There are many problems with this, including the fact that my friends may not be on Facebook or other networks yet and those that are may not post their hotel or automobile or restaurant preferences. Most seriously, while it is clear how Microsoft might benefit from this, using its Facebook connection to undercut Google sponsored search, it is not clear how Microsoft or any other firm could monetize this directly.

Contextual mobile ads. At present contextual mobile ads delivered by SMS appear to offer much promise. Imagine a hypothetical all-knowing information-based firm that (i) knows your location because you have registered to have the information from your in-phone GPS shared with your friends and (ii) knows that you like Thai restaurants because it monitors the content of your email and your online restaurant searches and (iii) knows that you are hungry because you just said so in a text message or Twitter post you sent from your phone. What a great time for them to text you an advertisement for a nearby Thai restaurant, sent directly to your phone. But why would you trust this? I remember when Hotels.com used to refer me to the same hotel, albeit at different prices, when I asked for a two-star or three-star hotel close to my office; I was never sure which was more amusing, the 80% price increase for the same hotel when I was willing to splurge on a three-star for my visitor, or the fact that there were comparable hotels 20 blocks closer to my office. I suspect that my hypothetical all-knowing firm will similarly be providing sponsored content; perhaps I will take a couple of additional seconds in order to find the restaurant I really want. This probably does not work as a form of advertising.

Of course no one knows yet, but if I had to guess, based on my *meatspace* experience, I would offer the following guesses for successfully monetizing the net in the future:

Selling Virtual Things: People will pay for superior, timely, original content and for superior online experiences. Presently I willingly pay for the *Financial Times*, *The Economist*, and *Foreign Affairs*, I value the content, and, indeed, I feel I need it; I will continue to pay for them online. Perhaps I would not be willing to pay for archive material, which I expect that I would be able to find elsewhere, but I will cheerfully pay for the newest content online. Similarly, I willingly pay the cover change for my favorite jazz clubs in New York, and expect that I would cheerfully pay to participate in Second Life or World of Warcraft if, indeed, I had any interest in those virtual experiences. I guess, ultimately, if we compete for status through our purchases of accessories, clothes and homes in *meatspace* we will probably continue to purchase *virtual accessories* in Second Life, though I can't say I fully understand this yet.

Selling Access. Misdirection will fail totally and completely. I use a Mac, but I have abandoned Safari for Firefox. I have an iPhone and an iPod but I have never used the little white earbuds, preferring instead to purchase a pair of Shure E500 phones that I think sound vastly superior. Similarly, I would be equally happy to purchase a search service that worked for me, rather than accept a free one that works both against me and against the firms I patronize. In contrast, while people will continue to value community content and social search, these will be difficult to monetize. Finally, contextual mobile ads will, likewise be difficult to monetize. With information easily available, I will make my own restaurant choices, irrespective of those pushed at me via SMS, especially when I know that those pushed at me have been pushed for a fee, rather than based on an impartial assessment of my preferences. Yes, I can imagine SMS ads initially succeeding if they provide discounts, but ultimately this leads to little more than a bidding war for traffic and benefits no one other than the firm that provides the text messaging services. I can think of a few commercial SMS services that will benefit everyone, such as letting the most loyal guests of a restaurant know when it is still possible to get a reservation if they act immediately, eliminating the inefficiency of empty tables, but the restaurant will do this itself, using its email or cell phone contact lists. I don't see this as advertising, or as being monetized by any intermediary. Of course, in an age before texting and email restaurants would have welcomed the all-knowing intermediary as the only mechanism available for communicating quickly with its most loyal customers. Now, restaurants have lists of their most loyal customers and can send out real time messages of interest. If the Blue Note were to text me on some night that I am in New York that it is still possible to get a table for two for Clark Terry, or Tria were to text me on a day when I was in Philadelphia that, surprisingly, there was no wait for an outdoor table right now, I'm sure I would respond to both. Of course there is no intermediary for this interaction, and this is more like direct communication than paid advertising.

The internet is about freedom, and I suspect that a truly free population will not be held captive and forced to watch ads. We always knew that freedom comes at a price; perhaps the price of internet freedom and the failure of ads will be paying a fair price for the content and the experience and the recommendations that we value.

Consumers More Willing to Click on Personalized Ad (% of spenders Online in previous 6 months)

Online Spending ($ in 6 mos.)	***% More Willing to Click***
$1-100	32%
101-250	39
Over 250	50
Total	39
Source: ChoiceStream Personalization Survey, 2008	

A recent survey from ChoiceStream shows that personalized ads do the best online. Frequent online shoppers are 32% more apt and willing to click on an online ad if it is personalized, frequent meaning purchases done within the past 6 months. And get this, the more the online users spends the greater their interest in personalized ads. Overall, 78% of online consumers are interested in receiving personalized content.

Think online advertising doesn't alter online user's behavior? Think again! 70% of consumers state that their purchase decisions are sometimes influenced by seeing an advertisement for a product or service.

When building your online advertising campaign is sure to personalize your advertisements to your target. A great way to do this is to use online tools such as "Quantcast" to really get to know your targets. It can show you what other sites they frequently visit, how old they are, and even how much they make. Also, keep your creative updated. The last thing you want to do is bore your online viewers with the same ad. Make it exciting, change it up, and keep it personalized.

III. Online Advertising Doesn't Work - Yet More Evidence

I recently came across a DoubleClick report entitled: Video Ad Benchmarks: Average Campaign Performance Metrics, which enthused about how video ads were 5 times more effective than graphic ads.

"Big deal," I thought. Traditional graphic ads, banner ads etc have a click thru rate barely above zero, so 5 times zero is still nothing.

My assessment was confirmed later in the report where it stated: "…the click-rate for plain GIF or JPG image ads based on DoubleClick data is approximately 0.1%"

So let's be clear about this. For every 1,000 people who see the ad, only 1 will actually click on it. If you couple that with the appallingly low conversion rates of 2% for most sites, then you need 50,000 people to see the ad just to make one sale.

IV. You Will Lose Money

With the average cost of an order per campaign running at around $100, it is a very expensive way to get a sale. In fact, depending on what you're selling and what your average order value is, it is highly likely the campaign is losing you money, a lot of money.

And that doesn't include the creative cost of making the ad if you're using an ad agency.

(The fact that video ads are only marginally more effective - 0.47% - only adds further weight as to how ineffective the whole online advertising strategy is.)

What 's more, these figures haven't improved in over 10 years.

That is, despite online advertising growing into a booming multi billion-dollar industry and attracting (supposedly) some of the best, most talented people, the industry is worse than ever at producing tangible, bankable results.

V. Accept the Evidence

And it's not as if the evidence hasn't been freely available to people who care to look. Every year there are numerous reports highlighting the dismal click thru rates of online advertising. To hide the awful truth of such poor performance, the industry has resorted to the usual trick of inventing new terms such as "engagement" and, "awareness" etc. Don't be fooled. As leading web research expert and Google evangelist, Avinash Kaushik says: "Engagement is not a metric, it's an excuse"

An excuse for not being willing to measure what really matters in business. And what really matters in any business is the bottom line - making a sale, making a profit, increasing the profit, reducing costs, generating a lead etc. Anything else is a path to bankruptcy.

Conclusion and Future Work

One of the great things about the web is that you can measure everything and see how effective anything is. Usually you will see results within 24 hours to 48 hours of implementing a direct marketing tactic. So, if your online advertising and marketing isn't producing clear results within that time frame, then it simply isn't working.

There are other much more effective and much cheaper options available.

At the end, I can say that Online advertising is a key economic driver in the Inter- net economy, funding a wide variety of websites and services. At the same time, ad networks gather a great deal of user information, for instance users' search histories, web browsing behaviors, online social networking profiles, and mobile locations. As a result, there are widespread concerns about loss of user privacy. In spite of all this, very little is publicly known about how ad networks use user information to target ads to users.

For instance, Google recently started allowing advertisers to target ads based not just on keywords and demographics, but on user interests as well. Knowing how well Google and others are able to determine user characteristics is an important consideration in the ongoing public debate about user privacy. If an ad network is able to accurately target users, we can deduce that the ad network is able to determine user characteristics (though the inverse does not follow). Given then the goal of determining how well ad networks can target users, the high-level methodology is straightforward. Create two clients that emulate different values of a given user characteristic (i.e. location or gender), and then measure whether the two clients receive different sets of ads as a result. If the ads are identical, we can trivially conclude the ad network doesn't use that user characteristic for targeting (although it might still be storing the data). But the outcome is unclear if the two sets are different: the difference may genuinely be due to the difference in characteristic, or it may be due to noise. As it turns out, the level of noise in measuring ads is extremely high. Even queries launched simultaneously from two identically configured clients on the same subnet can produce wildly different ads over multiple timescales. As we show later, some of this noise is systemic (e.g. DNS load- balancing), and can therefore be eliminated through proper experiment design. Other noise has a temporal component, which likely reflects ad churn, the constant process of old ads being deactivated and new ads being activated. We design a metric that mitigates the noise from churn. Overall this paper makes two contributions. First, we present the detailed design of a measurement methodology for measuring online advertising that is robust to the high levels of noise inherent in today's systems. We present a set of guidelines for researchers that wish to study advertising systems. Second, we present an analysis of the key factors that determine ad targeting on Google and on Facebook.

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