Equity Research
North America

Industry

Internet Direct Marketing & Advertising Services

Michael J. Russell
+1 (1)212 761 6352
Michael.Russell@msdw.com
Robert J. Keith
Rod Feuer
Mary Meeker
Mark Mahaney

Industry Overview

February 22, 2001

Correction: Does Internet Advertising Work? Yes, But...

COMPANIES FEATURED	
ADVO (ADVO $44)	Neutral
Harte-Hanks (HHS $23)	Neutral
Catalina (POS $34)	Neutral
Valassis (VCI $33)	Neutral

BEST IDEAS	
TMP Worldwide (TMPW)	Strong Buy
Avenue A (AVEA)	Outperform
DoubleClick (DCLK)	Outperform

- **Banner ads look like a surprisingly cost-effective branding tool**
  At today's prices, we believe banners are cost-effective in generating brand recall and brand interest, though not as good at creating awareness.
- **We think direct mail, e-mail & coupons are better direct marketing tools**
  Most solo direct mail, shared direct mail and coupons appear to perform better than banners; however, e-mail ranks near the top of cost-effective direct marketing.
- **Traditional advertisers spend little of their budgets on the Web**
  The top six US advertisers spend less than 1% of their budget on the Web. Additionally, based on our research 55-70% of Web ad spending is from dot-coms.
- **If Internet advertising works for branding, why aren't advertisers using it?**
  Agencies gain more creative fees from TV spots than banners. Advertisers don't yet trust the Internet's efficacy and continue to be wary of the new, new thing, a problem common to any new media.

Correction: Does Internet Advertising Work? Yes, But...

Summary and Investment Conclusion

Does today's Internet advertising work? We get asked this question every day. Interestingly, no one asks us "Does television advertising work?" or "Do coupons work?" But, to answer questions about Internet advertising requires a comparison to a wide range of alternatives. That is the purpose of this report.

Our answer is a qualified "Yes, Internet advertising works, but..." We have conducted an in-depth analysis of data gathered from many studies by AdRelevance, Avenue A, The Cable Advertising Bureau, C.E. Hooper, Inc., The Direct Marketing Association, Dynamic Logic, Media Dynamics, NCH, The Magazine Advertising Bureau, and Nielsen Media Research to form our conclusions. Our primary conclusion is that Internet advertising banners are a cost-effective branding tool, but they are only a moderately effective direct marketing tool.

We believe banners represent a cost-effective means of branding:

- **Banners exceed or are as good as magazines, newspapers and television in generating brand recall and brand interest**, in our view. However, to date we believe the Internet is only about half as good as TV and magazines at generating brand awareness.

- **When branding is considered in terms of cost effectiveness, banners look even better, based on our research.** We estimate that banners are 40–80% better than TV, magazines, and newspapers in brand recall and generating interest in a brand. As for generating brand awareness, we believe banners are about 40% better than TV, but remain about 20% worse than magazines.

- **At the average effective cost per thousand (CPM) price of $3.50, banners are 80% cheaper than TV and newspapers, making them very cost-effective, in our view.** Even if banner pricing rose by 20%, we believe it would still be the most cost-effective branding tool. However, undisciplined ad pricing stemming from supply and demand imbalances and a set of struggling companies have all lead the Internet's CPM to continue to fall. We feel that more price declines are likely in the near term, which we believe would further increase the affordability of Internet advertising.

Even if banner pricing rose by 20%, we believe it would still be the most cost-effective branding tool.

We believe that banners are a good — but not superb — direct marketing tool. Too much confusion emanates from cost-per-click or click-through rate calculations, which are simply requests for information rates. We focus instead on cost-per-order, which is the cost of generating a sale.

- **We estimate that shared direct mail, direct e-mail, and coupons are two to four times more cost-effective in generating orders than Internet banners.**

- **The Internet may be the ultimate direct marketing tool, but through e-mail, not static banners.**

- **Direct e-mail may get a performance boost from being used as a retention tool more than an acquisition tool.** Retention tools tend to have higher response rates.

- **Currently, digital direct marketing (including banners and e-mail) does not beat all paper-based direct marketing in cost-effectiveness** — shared direct mail and coupons do better. Solo direct mail, whether first class or third class, targeted or not, appears to be a more expensive means of reaching consumers than digital direct marketing.

Longer term, as consumers become more comfortable with security and privacy issues, Internet advertising may lead to more sales and therefore be viewed as a better direct marketing tool. However, we believe it is important to remain open to the concept that today's Internet shopper is browsing and researching more and closing the deal less, and marketers will use this background for evaluating effectiveness.

Theoretically, direct marketers could push for further price declines in banner CPMs. Based on Internet CPM data in 2H00 and so far in 2001, double-digit pricing declines seem to be the order of the day. Despite the falling

CPM, Internet advertising revenues have grown faster than any other media in history as the supply of inventory has more than offset the declining price per unit.

However, not every marketer can utilize all of these marketing services. Coupons tend to be used by consumer-packaged goods and health and beauty companies. Furthermore, getting a mailing address may be easier than getting permission to use an e-mail address for commercial solicitations.

> Currently, all digital direct marketing does not beat all paper-based direct marketing in cost-effectiveness

Will Internet advertising perform better in the future? Our answer is an *un*qualified "Yes." Below we describe why.

- The Internet is still a small medium. As the users and the time per user metrics increase (and other media decrease), advertisers will eventually follow the lead of consumers. Advertising budgets follow consumer's "time share's."

- Today's banner ads are too small, too static, always in the same location, and too easily missed. This will likely change.

- CNET (CNET, $14, rated Outperform by Mary Meeker) appears to be the most creative Internet advertising supplier, offering a wider range of banner sizes and formats. Others could soon follow suit, which would spur innovation and creativity.

- We believe that fuller screen, interruption-based Internet ads, like those presented by AOL (AOL, $45, rated Strong Buy by Mary Meeker, Richard Bilotti, and Mark Mahaney) or Unicast, are likely to become more prevalent — and irritate users. (But hey, users want something for free and investors want profitable business models, so more ad interruptions are likely in the future).

- While full-screen ads increasingly appear, Personal Video Recording technology, like TiVo, will likely push TV advertising toward product placement promotions and streaming banners. This may tip the scales in favor of companies with a core-competency in Internet advertising, rather than TV advertising.

- The eyeball is attracted to motion, while the ear is attracted to sound. Rich media has been shown to be five times more effective at generating brand recall than traditional banner ads. As more users hook up to the Internet via broadband connections, more rich media ads will develop and will likely garner greater response rates.

- Rich media ads cost more to create, which means advertising agencies should profit more from creating them than static banners. This could lead the agencies to support Internet advertising more in the future (they currently generate small fees from creating banner campaigns). For now, the average banner costs less than $10,000, while the average TV spot costs more than $340,000. TV creative services leave more room for agency profits.

What Do Clients Think About Internet Advertising?

Traditional US advertisers are not spending a significant portion of their marketing budgets online. General Motors, the top US advertiser in 2000 (as extrapolated from data through August), has spent less than 1% of its advertising dollars on the Internet, by our calculations. The story is the same at Philip Morris, DaimlerChrysler, Procter & Gamble, and Ford, the second-, third-, fourth- and fifth-largest US advertisers through August. While this alerts us to just how little the large traditional advertisers are spending on the Internet, it also heightens the opportunity for e-marketing, as there is a greater share of traditional advertisers' budgets to grab.

Disney and Microsoft are the most notable exceptions. Disney is the only advertiser in the top 20 (ranked number seven) to devote more than 1% of its budget to the Internet (it spent nearly 2% of its marketing budget on the Internet through August). Microsoft, the 30th-ranked total advertiser, is the largest online advertiser and has spent the largest portion of its total budget on the Internet — 19%.

Disney's perspective is very important, complex and discouraging. Disney (DIS, $32, rated Outperform by Richard Bilotti) was caught up in the Internet advertising storm, and recently announced plans to shut down its Go.com portal. Disney is a traditional brand, a traditional media company, and a new media company. In announcing the closure of Go.com on January 29, Disney CEO Michael Eisner was quoted in the *Financial Times* as saying, "The advertising community has abandoned the Internet." This is not good from the standpoint of a seller of Internet advertising space, but it is also worrisome from the standpoint of an industry buyer. Disney is the only top 20 advertiser to devote more than 1% of its budget to the Internet (it spent nearly 2% of its marketing budget on the Internet through August 2000). If a lot of this spending was to support Go.com, then Disney may fall back into the pack on Internet advertising commitments.

Internet advertising spending may be even more dependent on dot-coms than we thought. By categorizing the top 50 and top 100 Web advertisers, we calculate that 55-70% of Internet advertising spending is from dot-coms. However, AOL and Yahoo! (YHOO, $27, Outperform, covered by Mary Meeker and Mark Mahaney) are about 25% and 34% exposed to dot-com advertising, respectively, by our estimates. Assuming this is correct, the implication would be that the rest of the Internet's advertising is from dot-com advertisers. We find that the middle ground is most appropriate, and calculate the dot-com advertising presence on the Internet in total to be in the 55-70% range.

This is higher than most other analyses, and may differ from other research in that we are counting dollars of advertising, as opposed to advertising impressions or numbers of companies. We are also separating the various divisions within companies (for instance, we count MSN as dot-com, but Microsoft as traditional and barnesandnoble.com as dot-com, but Barnes and Noble as traditional). Interestingly, of the top 100 Internet advertisers, about 45 are traditional companies. It is just that in terms of spending, it looks more skewed.

At this point, dot-coms are more focused on direct marketing effectiveness, which should favor direct e-mail over banner ads. If the dot-coms become interested in branding again, the banner ads are likely to be a better place for them than Super Bowl ads. However, in this survival mode, they are more likely to favor cost-effectiveness in generating orders, which favors shared direct mail, direct e-mail, and coupons before banner ads.

> We calculate that 55-70% of Internet advertising spending comes from dot-com advertisers.

Based on This Analysis, What Stocks Should One Own?

Following on the thesis of this report, we are more positive on the outlook for three companies we currently rate Neutral: Catalina, ADVO, and Valassis. While it may seem strange in a report on Internet advertising effectiveness to point to the efficacy of traditional media, however we find we appreciate the value of marketing tools like coupons (especially targeted) and shared direct mail.

Among the e-advertising companies we cover, we recommend DoubleClick and Avenue A (both rated Outperform), for their long-term benefits. While we think that the market's expectation of a turnaround in these businesses may occur more in the second half than the second quarter, we look for three strategies to come more into focus before we would recommend these stocks more aggressively:

- **More attention on branding benefits to attract traditional advertisers.** This should shore up the perceived value of Internet advertising and pricing.
- **A continued desire to move beyond the banner.** A push for bigger and more variable ad formats should help, as waiting for the rollout of broadband and the ensuing rich media may take a while.
- **A focus on e-mail to attract direct marketers.** To date, e-mail offerings at DoubleClick and Avenue A have been nascent, proving that it may be harder to get this "right" than many previously thought. In our opinion, since the direct marketing sales pitch fits so well with direct e-mail, getting this right should resonate with their current set of traditional and dot-com customers.

Outside of our coverage universe, we are impressed with the unique position of AOL Time Warner and the willingness to tinker with the online ad space by CNET. AOL Time Warner's AOL appears to be moving beyond the banner with full-screen pop-up ads that are more broadcast style in their appearance and are therefore more advertiser-friendly. CNET appears willing to tinker with size, location, and depth of its ad space to triple some response rates in an effort to move beyond the banner and impress advertisers.

Exhibit 1

Comparing Media Effectiveness in Branding and Direct Marketing

	Media Advertising			Internet		Marketing Services					
	TV	**Magazines**	**Newspapers**	**Banners**	**eMail**	**FSI Coupons**	**POS Targeted Coupons**	**Shared Direct Mail**	**Solo Direct Mail: 1st Class targeted**	**Solo Direct Mail: 1st Class untargeted**	**Solo Direct Mail: 3rd Class untargeted**
Leading companies	VIA		GCI	DCLK		VCI	POS	AD			
Branding											
CPM - *cost per 1000 impressions*	$16.00	$6.00	$19.00	$3.50	$20.00	$7.00	$76.70	$40.00	$965.58	$701.75	$518.24
Indexed to Internet	457%	171%	543%	100%	571%	200%	2191%	1143%	27588%	20050%	14807%
Generating Brand Awareness:	36%	29%	NA	14%	NA	NA	NA	NA	NA	NA	NA
Indexed to Internet	257%	207%	NA	100%	NA	NA	NA	NA	NA	NA	NA
Cost Effectiveness	56%	121%	NA	100%	NA	NA	NA	NA	NA	NA	NA
Brand Recall Ability:	17%	26%	23%	27%	NA	NA	NA	NA	NA	NA	NA
Indexed to Internet	63%	96%	85%	100%	NA	NA	NA	NA	NA	NA	NA
Cost Effectiveness	14%	56%	16%	100%	NA	NA	NA	NA	NA	NA	NA
Generating Brand/Product Interest:	46%	44%	NA	44%	NA	NA	NA	NA	NA	NA	NA
Indexed to Internet	105%	100%	NA	100%	NA	NA	NA	NA	NA	NA	NA
Cost Effectiveness	23%	58%	NA	100%	NA	NA	NA	NA	NA	NA	NA
Direct Marketing											
Response rate (request for info per impression)	NA	NA	NA	0.3%	3.0%	NA	NA	NA	NA	16.6%	13.5%
Cost Per Reponse / Cost per Click	NA	NA	NA	$1.17	$0.67	NA	NA	NA	NA	$4.23	$3.84
Sales rate	NA	NA	NA	0.1%	1.5%	1.5%	8.5%	4.8%	2.0%	0.5%	0.4%
Additional cost of sale	NA	NA	NA	$0.00	$0.00	$0.80	$0.80	$0.00	$0.00	$0.00	$0.00
CPO - cost per order	NA	NA	NA	$3.50	$1.33	$1.27	$1.70	$0.83	$48.28	$131.98	$119.85
Cost Effectiveness Relative to Internet Banners											
Average Branding	31%	78%	16%	100%	NA	NA	NA	NA	NA	NA	NA
Ranking	3	2	4	1	NA	NA	NA	NA	NA	NA	NA
Generating Responses	NA	NA	NA	100%	175%	NA	NA	NA	NA	28%	30%
Ranking	NA	NA	NA	2	1	NA	NA	NA	NA	4	3
Generating Orders	NA	NA	NA	100%	263%	276%	206%	420%	7%	3%	3%
Ranking	NA	NA	NA	5	3	2	4	1	6	7	7

Note 1: When comparing direct marketing effectiveness, there should be at least qualitative distinction between targeting and mass effectiveness. Mass media, like Free Standing Insert (FSI) coupons, offer coupons to everyone, which means some would buy your product without these savings but you cannot keep them from clipping the coupon. This is not as good as coupons that are targeted to those you wish to influence (and away from those who you wish to leave alone in their behavior). We believe this is why Catalina's Point-of-Sale coupon effectiveness is higher than Valassis' FSI effectiveness.

Note 2: When comparing direct marketing tools, it is also helpful to know which are used more in higher response rate retention programs and which are used in lower response rate customer acquisition programs. Direct e-mail tends to be retention-based, while banners tend to be acquisition-oriented. We think this tilts the cross-media comparison in favor of direct e-mail.

Sources: Morgan Stanley Dean Witter, 24/7 Media, AdRelevance, ADVO, Cable Advertising Bureau, C.E. Hooper, Inc., Direct Marketing Association, Dynamic Logic, Media Dynamics, NCH, Magazine Advertising Bureau, Nielsen Media Research.

Observations on Media Effectiveness

The Internet performs well across branding measures, but we believe it is better for those who already have a brand than those who are trying to develop one. For many sites, the Internet is outclassed by television and print in generating awareness of a brand, but leads print media in brand recall and is about even in generating interest in a brand. (Note: The studies conducted did not analyze rich media on the Internet, rather they focused only on static banner ads. Thus, future Internet advertising incorporating rich media and better targeting will likely elevate the Internet's ranking. Of course, interactive television will likely alter the landscape as well.)

In the area of brand recall, the Internet appears to lead magazines, newspapers, and television, in that order. Consumers studied showed a 27% greater ability to recall a brand after seeing an Internet ad than before. Magazines increased consumer brand recall by 26%, newspapers by 23%, and television by 17%. Streaming media has been shown to be five times more effective at generating brand recall than traditional banner ads, further lifting the Internet's brand recall lead.

Exhibit 2

Advertising Effectiveness Rankings

Branding Metric	**Ranking**
Generating Brand Awareness	
	Television
	Magazines
	Banners
Generating Brand Recall	
	Banners
	Magazines
	Newspapers
	Television
Generating Product Interest	
	Television
	Banners, Magazines

Sources: Morgan Stanley Dean Witter, 24/7 Media, AdRelevance, ADVO, Cable Advertising Bureau, C.E. Hooper, Inc., Direct Marketing Association, Dynamic

Logic, Media Dynamics, NCH, Magazine Advertising Bureau, Nielsen Media Research.

In generating interest in a product or brand, the Internet appears to rank in the middle of the pack. After seeing a banner ad, consumers were 44% more interested in learning more about a product than they were before seeing the ad. The comparable figure for television was 46% and for magazines was 44%.

In generating awareness for a particular brand, the Internet lags both television and magazines. That having been said, the Internet has been shown to raise awareness of a particular brand by an average of about 14% (television came in at 36% and magazines at 29%). It has also been demonstrated that more exposure to banner ads builds more brand awareness.

The Internet is relatively inexpensive, which leads to branding cost-effectiveness. Banner advertising based on the ***list price*** is less cost effective in generating brand awareness, brand recall, and product interest than television, magazines, and newspapers. (Although the list price varies by site, AdKnowledge reports an average Internet advertising list price of about $34 for banners.) However, we do not believe this is the right way to calculate effectiveness.

> We calculate an effective CPM of about $3.50 for 2000, which coincidentally approximates the media CPM for DoubleClick and looks like it is on pace to decline more than 10% in 2001.

The ***effective*** CPM tells a different story. (The effective CPM is the price that is actually paid by the advertiser after all bargaining and bartering is complete, whereas the list price CPM is simply a number on a rate card from which the bargaining begins.) We calculate an effective CPM of about $3.50 for 2000, which coincidentally approximates the media CPM for DoubleClick and looks like it is on pace to decline more than 10% for 2001.

Based on an effective CPM of about $3.50, banner advertising is less cost-effective at generating brand awareness than magazines, but more than television. In generating brand recall, the Internet's effective CPM is more cost-effective than television, magazines, and newspapers. In generating product interest, the Internet's effective CPM ranks it as the most cost-effective media — above television, magazines, and newspaper.

Exhibit 3

Cost-Effectiveness Rankings

Branding Metric	Cost-Effectiveness Rankings
Generating Brand Awareness	
	Magazines
	Banners (Effective CPM)
	Television
Generating Brand Recall	
	Banners (Effective CPM)
	Magazines
	Newspapers
	Television
Generating Product Interest	
	Banners (Effective CPM)
	Magazines
	Television

Sources: Morgan Stanley Dean Witter, 24/7 Media, AdRelevance, ADVO, Cable Advertising Bureau, C.E. Hooper, Inc., Direct Marketing Association, Dynamic Logic, Media Dynamics, NCH, Magazine Advertising Bureau, Nielsen Media Research.

Banners are a good — but not a superb — direct marketing tool. Internet advertising appears to be a moderately cost-effective means of generating sales via direct marketing. Internet advertising is not the shining star of direct marketing; we believe shared direct mail, direct e-mail, and coupons are. The value of direct marketing is largely based on the relevance of the message. Thus, targeting the appropriate message to the appropriate consumer is the key in the online world, just as it is in the offline world. As targeting on the Internet and via e-mail improves over time, we expect these forms of direct marketing to move up in the rankings.

While the current click-through rate (response rate) on banner advertising is about 0.3%, most of these are simply requests for more information. The sales rate is about 0.1% of the banners viewed, which implies a 33% conversion rate. This pales in comparison to e-mail's 3.0%-plus response rate (sales and requests for more information) and 1.5% sales rate. Most interesting of all, click-through rates have been shown by AdKnowledge, Avenue A, and others **not** to be correlated with sales. Another interesting fact unearthed by Avenue A is that approximately 13% of the banners that are clicked on, are clicked on by current customers. Thus, we conclude banners are a good customer retention tool, as well as a prospecting tool.

In generating cost-effective orders via direct marketing, the Internet falls in the middle of the road, while e-mail ranks near the top. Shared direct mail is the most cost-effective means of direct marketing, followed by free standing insert coupons, e-mail, point-of-sale targeted coupons, banner advertising, and direct mail.

When comparing direct marketing effectiveness, there should be at least a qualitative distinction between targeting and mass effectiveness. Mass media, like Free Standing Insert (FSI) coupons (mass-market coupons offered to all consumers whether they had previously planned to purchase the product or not), result in extra costs as many consumers would have purchased the product without the coupon incentive. This is in contrast to coupons that are targeted to individuals that advertisers wish to influence. This is why, in our view, Catalina's Point-of-Sale coupon effectiveness is higher than Valassis' FSI effectiveness.

When comparing direct marketing tools, it is also helpful to know which are used in (higher response rate) retention programs and which are used in (lower response rate) customer acquisition programs. Direct e-mail tends to be retention-based, while banners tend to be acquisition-oriented. This tilts the cross-media comparison in favor of direct e-mail.

Exhibit 4

Cost-per-Sale via Direct Marketing Rankings

Direct Marketing Metric	Ranking
Cost-per-Sale	
	Shared Direct Mail
	Free Standing Insert Coupon
	eMail
	Point of Sale Targeted Coupons
	Banners
	Direct Mail

Sources: Morgan Stanley Dean Witter, 24/7 Media, AdRelevance, ADVO, Cable Advertising Bureau, C.E. Hooper, Inc., Direct Marketing Association, Dynamic Logic, Media Dynamics, NCH, Magazine Advertising Bureau, Nielsen Media Research.

The Cost of Internet Advertising

Internet analysts and investors continuously attempt to gauge the cost of advertising on the Internet, or the CPM. The Internet's virtually limitless supply of advertising inventory makes this a very tough job. Most sites start with a rate card CPM and then bargain with advertisers to reach a more suitable price. It is our belief that an average effective CPM of about $3.50 exists once all of this bargaining is complete. Of course, many sites demand much higher fees and many go for considerably less.

Exhibit 5

Average Rate Card CPM by Site Category

Category	CPM
Health & Fitness	$43
Home & Garden	$43
Business & Finance	$38
General News	$38
Movies & TV	$34
Automotive	$32
Society, Politics & Science	$30
Travel & Maps	$29
Sports & Recreation	$28
Portal	$27
Kids & Family	$26
Search Engine	$25
Music & Streaming Media	$25
Personal Expression	$25
Yellow & White Pages	$24
Games	$24
Comics & Humor	$24
Community	$20

Source: AdRelevance

While the Internet's rate card CPM looks extremely high compared with other media, its effective CPM of $3.50 appears quite reasonable. Daily newspapers generate the highest CPMs (about $19) due to their targeting ability. Prime-time broadcast television commands the second-highest CPM (about $16) due to its broad reach. Eventually, we believe the Internet will likely be able to combine very good targeting and very broad reach and thus generate a CPM above its current level.

Exhibit 6

CPMs by Media

Media	Average CPM
Daily Newspapers	$19
Prime-Time Broadcast TV	$16
Radio	$6
Magazines	$6
Day-Time Broadcast TV	$5
Internet Effective CPM	$4

Source: Morgan Stanley Dean Witter

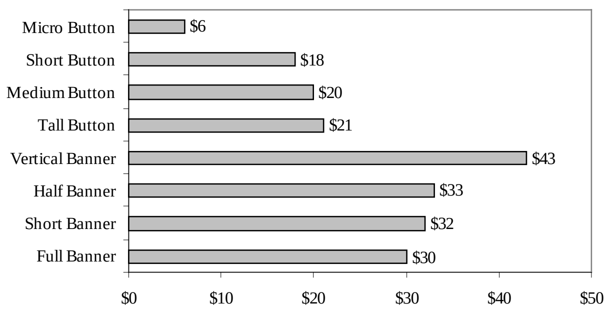
The many sizes and shapes of advertising on the Internet each demand a different price. The most expensive is the vertical banner, which goes for a rate card price of $43, according to AdRelevance. This is largely due to its greater branding and response generation ability. The half banner comes in second with a rate card price of $33. The micro button is the least expensive, commanding an average rate card CPM of $6.

Types of Internet Advertising

The banner ad was the original Internet advertising format. Since 1995, the sizes and shapes of Internet ads have changed to promote greater branding and click-throughs. The banner is still the most popular type of advertising on the Internet. Below is a list of the most popular types of Internet banner advertising.

Exhibit 7

Average Rate Card CPM of Various Advertising Sizes



Source: AdRelevance

Exhibit 8

Percentage of Sites Using Type of Advertising

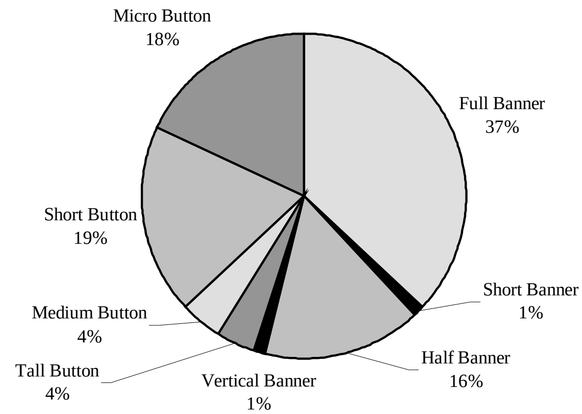
Type of Advertising	% of Sites Accepting
Full Banner	97%
Micro Button	76%
Short Button	68%
Medium Button	52%
Half Banner	42%
Tall Button	36%
Short Banner	29%
Vertical Banner	16%
Other	8%

Source: AdRelevance

Other types of advertising are catching up to the banner ad in terms of impressions garnered. According to AdRelevance, the full banner accounts for 37% of Internet advertising impressions. The various sizes and shapes of buttons ad up to 35% of all Internet advertising, a close second to banners.

Exhibit 9

Percentage of Internet Advertising Impressions



Source: AdRelevance

Exhibit 10

Top Overall U.S. Advertisers Through August, 2000

Company	% of Budget Online	Online Advertiser Rank
1. General Motors	<1%	543
2. Philip Morris	<1%	623
3. Daimlerchrysler	<1%	852
4. Procter & Gamble	<1%	2,079
5. Ford Motor	<1%	218
6. Time Warner	<1%	118
7. Walt Disney	2%	15
8. Johnson & Johnson	<1%	1,720
9. Pfizer	<1%	1,269
10. Unilever	<1%	4,213
11. Toyota	<1%	245
12. AT&T	1%	49
13. McDonalds	<1%	747
14. National Amusements	<1%	2,897
15. News Corp	<1%	182
16. Honda Motor Co	<1%	189
17. Verizon	<1%	125
18. Nissan Motor Co	<1%	1,153
19. Ford Motor Dealer Association	<1%	NA
20. Sony	<1%	152
21. Federated	<1%	549
22. US Government	NM	NM
23. Tricon Global Restaurants	<1%	965
24. Diageo Plc	<1%	920
25. Sears	1%	55
26. MCI Worldcom	1%	95
27. Pepsico	<1%	271
28. General Motors Local Dealers	NM	NA
29. Loreal	<1%	942
30. Microsoft	19%	1

Sources: Morgan Stanley Dean Witter, AdRelevance, Competitive Media Reporting

Traditional Advertisers Coming Online… Very Slowly

The top traditional advertisers are starting to advertise online, but at a very slow pace. Furthermore, once they have a presence on the Internet, the top advertisers are devoting only a very small portion of their budget to Internet advertising. Our industry forecast projects that Internet advertising accounted for 4% ($7.6 billion) of total US advertising in 2000. When we look at Internet advertising as a share of total US marketing (including marketing services, public relations, promotions, direct marketing, and others) in 2000, we estimated that it represented only about 1.5% of the total marketing budget.

Our analysis shows that the top US advertisers are not spending anywhere near this amount of their marketing budget online. Although the top marketers are generally automotive and consumer product goods manufacturers (goods that are not easily purchased on the Internet), we are still surprised by the meager portions of their budgets that the top advertisers are spending on line.

Exhibit 11

Allocation of Ad Budgets Among Traditional and Internet Media by the Top Advertisers on the Internet Through August 2000

Company	% Traditional	% Internet
1. MSN*	81%	19%
2. Yahoo!	26%	74%
3. Capital One	46%	54%
4. Microsoft	81%	19%
5. AmeriDebt	25%	75%
6. Netscape	21%	79%
7. Snowball.com	27%	73%
8. Amazon.com	53%	47%
9. LifeMinders.com	25%	75%
10. One & Only	0%	100%

Sources: Morgan Stanley Dean Witter, AdRelevance, Competitive Media Reporting

** MSN is shown as a share of Microsoft's total budget.*

Of course, any new medium requires time to gain acceptance. According to Yahoo!'s CEO Jerry Yang, Procter & Gamble applied only 5% of its marketing budget to the relatively new medium of television in 1950. Five years later, the company lifted TV's share of its marketing budget to 80%. By that time, TV advertising had increased six times from $171 million to $1,035 million. This is a relevant example, in our view, of how quickly advertisers will move their marketing budgets once they trust a medium. Although we do not expect advertisers to immediately spend 85% of their budget on line, we are in a period of building trust with a new media and would expect significant gains in advertising share for the Internet.

Exhibit 12

Top 50 Internet Advertisers (January-August 2000) & Whether We Rank Them as Dot-Coms

Rank	Brand	Dot-Com
1	MSN	Yes
2	Yahoo!	Yes
3	Capital One	No
4	Microsoft	No
5	AmeriDebt	No
6	Netscape	Yes
7	Snowball.com	Yes
8	Amazon.com	Yes
9	LifeMinders.com	Yes
10	One & Only	Yes
11	Network Solutions	Yes
12	Corbis	No
13	Fidelity Investments	No
14	Ebay	Yes
15	Go	Yes
16	Lowestfare.com	Yes
17	AOL	Yes
18	ZDNet	Yes
19	Net2Phone	Yes
20	WingspanBank.com	Yes
21	Ubid	Yes
22	WebMD	Yes
23	NextCard	No
24	E*TRADE	Yes
25	Excite	Yes
26	ClassMates.com	Yes
27	About.com	Yes
28	NeoPlanet	Yes
29	Bonzi Software	No
30	Cassava Enterprises	No
31	GetSmart.com	Yes
32	Ameritrade	Yes
33	ESPN	No
34	Citicorp	No
35	AltaVista	Yes
36	RadioShack	No
37	ServiceMagic	No
38	Healthquick.com	Yes
39	Qwest	No
40	First USA	No
41	K-Mart	No
42	HealthAxis.com	Yes
43	1-800-FLOWERS.COM	Yes
44	MP3.com	Yes
45	MBNA America Bank	No
46	X10	Yes
47	Sun Microsystems	No
48	AskMe.com	Yes
49	AT&T	No
50	enews.com	Yes

Source: Morgan Stanley Dean Witter Research & AdRelevance

General Motors, the top US advertiser for 2000, spent less than 1% of its advertising dollars on the Internet, by our calculations. The story is the same at Philip Morris, DaimlerChrysler, Procter & Gamble, and Ford, the second-, third-, fourth-, and fifth largest U.S. advertisers this year (extrapolated from data through August). In fact, Disney is the only advertiser in the top 20 (ranked number seven) to devote over 1% of its budget to the Internet (Disney has spent nearly 2% of its marketing budget on the Internet). Microsoft, the 30th ranked total advertiser in 2000, is the largest online advertiser and has spent the largest portion of its total budget on the Internet — 19%.

There is very little overlap between the top advertisers on the Internet and the top advertisers inclusive of all media. Only three companies — Disney, AT&T and Microsoft — are among the top 50 advertisers on the Internet and in all media. The top Internet advertisers are dominated by technology-oriented companies, particularly those with Internet operations. These companies typically spend the majority of their advertising budgets on the Internet.

Dot-Coms Represent 55-70% of Internet Advertising

Although most research companies put the dot-com/ traditional advertiser ratio around 50/50 right now, we feel it is closer to 55-70% dot-com. Our analysis differs from other research in that we are counting dollars of advertising, as opposed to advertising impressions or numbers of companies. We are also separating the various divisions within companies (for instance, we count MSN as dot-com, but Microsoft as traditional and barnesandnoble.com as dot-com, but Barnes and Noble as traditional).

Based on our analysis of AdRelevance's list of the top spenders on Internet advertising so far this year, we find that seven of the top 10 advertisers are dot-coms. Furthermore, 15 of the top 20 and 29 of the top 50 are dot-coms. Interestingly, of the top 100 Internet advertisers, 45 are traditional companies. It is just that in terms of spending, it is more skewed.

We feel that special care needs to be taken in the definitional aspects of dot-coms. For our purposes, we assumed that any company that gains a majority of its revenues from offline sources is a "traditional" company/division, unless the brand being advertised is a unique online brand.

For instance, we listed Barnes&Noble.com as an online company because it is a separate entity that operates solely on the Internet. On the other hand, we listed Microsoft as an offline company as the vast majority of its business is still from the traditional space. We listed MSN — The Microsoft Network (Microsoft's Internet presence) as an Internet brand, due to its Internet-only business. If one were to consider MSN, the largest Internet advertiser, as a traditional, the ratio would shift to 57% dot-com and 43% traditional. Additionally, it should be noted that AdRelevance does not capture sponsorships or rich media advertisements, which are more expensive and more likely to be used by traditional companies.

We have included a ranking of the top 50 advertisers on the Internet so that one can judge for him/herself whether our break-out between dot-coms and traditionals is appropriate, and, if not, conduct an individual analysis.

While inter-media comparisons of branding and sales generation are difficult, we worked with what we believe is the best data available to generate a comprehensive picture that compares all major media. In the traditional space, we relied on data from Morgan Stanley Dean Witter, ADVO, Avenue A, The Cable Advertising Bureau, C.E. Hooper, Inc., The Direct Marketing Association, Media Dynamics, NCH, The Magazine Advertising Bureau, and Nielsen Media Research. Below, we describe in more detail, the branding studies that have been conducted on Internet advertising.

Study #1: The Internet Is Capable of Branding

In probably the most in-depth study yet of the effectiveness of Internet advertising, Dynamic Logic, 24/7 Media, and AdRelevance teamed up to provide insight into banner advertising's effectiveness.

Exhibit 13

The Effectiveness of Banner Advertising

Metric	Mean	Std. Deviation
Awareness	7%	0.18
Purchase Intent	2%	0.10
Recall	27%	0.15
Interest	44%	0.20
Perceived Clarity	63%	0.19
Message Association	20%	0.37

Source: AdRelevance, Dynamic Logic, 24/7 Media

Banner advertising was shown to increase brand awareness by an average of 7%. The results carried a correlation of 0.29 and a confidence interval of 0.05. Interestingly, brand awareness is inversely related to the number of elements in a banner: the more cluttered the banner, the less likely consumers are to recall it.

Banners were shown to increase message association (the ability to connect a message with an advertiser) by 20%.

The results carried a correlation of 0.54 and a confidence interval of 0.01.

Banner advertising lifted brand recall by 27%. Like the awareness measures, recall was positively related to the banner's clarity. The results carried a correlation of 0.47 and a confidence interval of 0.01. Importantly, clutter was shown to negatively impact the banner's ability to brand.

Purchase intent increased slightly by 2%, after exposure to banner advertisements.

Clarity (referring to the consumer's ability to understand the advertiser's message) was significantly increased by banner ads (63%). Clarity was related to a banner's size, suggesting that the larger a banner — and the larger the advertiser's logo within the banner — the clearer the message.

Consumers' interest in a particular product or service increased 44% in the study. Once again, larger banners generated more interest, and cluttered banners generated less interest.

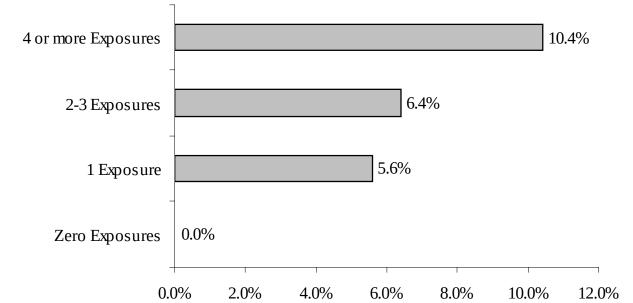
Study #2: The Internet Is Capable of Branding

In a second study by Dynamic Logic, a group of individuals was exposed to banner ads and later presented with a list of some of the advertisers. A second group visited the same sites, but were presented with no banner ads. The individuals exposed to banner ads had a 5.6% higher brand awareness than those not exposed to banner ads.

Dynamic Logic's studies have shown that there appears to be a direct correlation between the number of times a viewer sees a banner ad and that individual's brand awareness. According to Dynamic Logic, by lifting banner ad exposures from one to four or more exposures, consumers' brand awareness doubled.

Exhibit 14

More Banners Leads to More Branding



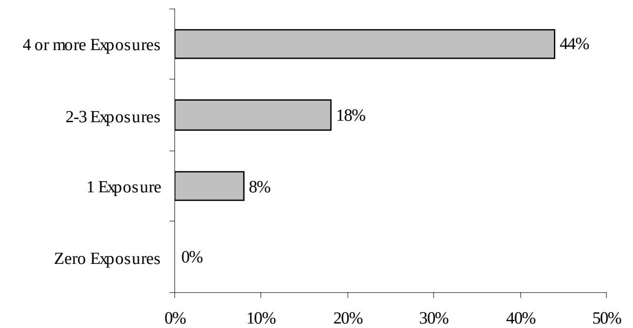
Source: Dynamic Logic

Study #3: The Internet is Capable of Branding

In another study conducted by Dynamic Logic, for client Travelocity, banners showed an even greater lift in brand awareness. A single banner exposure lifted brand awareness by 8%, two or three exposures by 18%, and four or more exposures by 44%. The greater increase in brand awareness (as compared to the previous study) is likely a result of better creativity on the part of the advertiser.

Exhibit 15

More Banners Lead to More Branding — Travelocity



Source: Dynamic Logic

Dynamic Logic has also shown improvements in message association (the ability to match an advertiser's message with the appropriate advertiser) via banner ads. The company's studies indicate that on average, exposure to banner ads lifts a consumer's ability to connect an advertiser with its message by 12%.

Study #4: Banners Boost Online Sales and Traffic

In December 2000, Avenue A conducted a test for an online travel company. Avenue A exposed a group of users to ads for the travel site and a second group of users to other banners (not for the travel site). The company then monitored user's behavior. It is important to note that both groups saw the same offline ads, so any difference in their behavior was due to Internet advertising. The result: the group exposed to the ads showed 10% greater proclivity to go to the site and make a transaction than the group not exposed to the ads. Even more interesting, of those who purchased something at the travel site, only 20% of them had clicked on an ad; 80% of purchasers ***did not*** click on an ad.

Study #5: Banners Can Boost Offline Sales

DoubleClick and Information Resources (IRI) teamed up to measure the effect of online advertising on offline sales. Once again, one group of users was exposed to banner ads for particular companies, while a second group saw no Internet advertising. DoubleClick and IRI split the advertising into two types of products: impulse purchases (food) and planned purchases (cleaning and personal hygiene).

DoubleClick's study found that Internet advertising lifted impulse purchases by 19% (versus the control group that saw no Internet ads), but had no effect on planned purchase goods. Furthermore, the company found that frequency had an impact on offline purchase behavior. Three to six ad exposures showed no significant lift, 7–10 exposures showed a 28% lift in impulse purchases, and 11-plus exposures showed a 21% lift.

Study #6: Targeted Ads Drive Click-Throughs

Avenue A conducted a study for MSN's CarPoint measuring the effectiveness of targeted advertisements. The company created four groups. The first group was made up of standard Internet users and served untargeted ads. The second group was made up of interest-segmented Internet users and served ads based upon their interests. For instance, users that showed a proclivity to visit sports sites were served sports-oriented ads. The third group was made up of users who had taken particular actions on certain sites and served targeted advertisements based on their prior actions. For instance, users that had read reviews of a particular car on Microsoft's CarPoint, were served ads based on the cars they had viewed. The fourth group was composed in the same manner as the third group (by actions they had previously take) and served ads based upon that prior action, but this time, the banners were optimized based upon which ones were generating the best responses.

The results were very interesting. No increase in click-throughs was observed for the group that was served advertising based upon their interest segments (group 2). A 20% increase occurred in the group that was served targeted ads based upon actions they had previously taken (group 3). An even higher 38% increase in click-throughs was shown by the group that was served targeted ads based on previous actions and had these messages optimized depending on which messages were generating the greatest responses (group 4).

Current prices for Best Ideas mentioned: TMPW ($53), Avenue A ($1), and DoubleClick ($12).

Exhibit 16

Top 50 U.S. Advertisers (January - August 2000)

Marketer	Total Advertising ($MM)	Internet Advertising ($MM)*	% of Budget Online	Online Advertiser Rank
1. General Motors	1,792,053,100	240,000	<1%	543
2. Philip Morris	1,128,271,700	184,000	<1%	623
3. Daimlerchrysler	979,235,500	110,000	<1%	852
4. Procter & Gamble	933,985,400	17,200	<1%	2,079
5. Ford Motor	780,706,000	760,000	<1%	218
6. Time Warner	768,910,000	1,420,000	<1%	118
7. Walt Disney	643,328,500	7,600,000	2%	15
8. Johnson & Johnson	561,678,700	28,000	<1%	1,720
9. Pfizer	539,505,700	52,000	<1%	1,269
10. Unilever	517,113,600	2,400	<1%	4,213
11. Toyota Motor Corp	478,032,600	660,000	<1%	245
12. AT&T Corp	473,832,300	2,800,000	1%	49
13. McDonalds Corp	462,991,400	138,000	<1%	747
14. National Amusements	456,285,700	7,200	<1%	2,897
15. News Corp	435,806,200	960,000	<1%	182
16. Honda Motor	430,226,200	920,000	<1%	189
17. Verizon Communications	415,891,800	1,340,000	<1%	125
18. Nissan Motor	403,550,700	62,000	<1%	1,153
19. Ford Motor Co Dealer Association	393,367,000	NA	<1%	NA
20. Sony Corp	384,079,600	1,160,000	<1%	152
21. Federated Dept Stores Inc	381,850,700	240,000	<1%	549
22. US Government	380,080,400	NM	NM	NM
23. Tricon Global Restaurants Inc	376,660,300	90,000	<1%	965
24. Diageo Plc	366,840,800	96,000	<1%	920
25. Sears Roebuck & Co	365,666,700	2,600,000	1%	55
26. MCI Worldcom Inc	352,945,300	1,700,000	<1%	95
27. Pepsico Inc	344,121,700	600,000	<1%	271
28. General Motors Corp Local Dealers	338,092,300	NM	NM	NM
29. Loreal	335,146,000	94,000	<1%	942
30. Microsoft Corp	332,159,800	66,000,000	19%	1
31. Sprint Corp	331,040,800	620,000	<1%	264
32. Ford Motor Co Local Dealers	328,102,700	NM	NM	NM
33. Bristol-Myers Squibb	312,239,400	2,600	<1%	4,026
34. Seagram Co	287,373,600	9,800	<1%	2,603
35. May Dept Stores	287,362,700	NM	NM	NM
36. Smithkline Beecham Plc	287,049,600	6,200	<1%	3,062
37. General Mills	286,549,800	64,000	<1%	1,150
38. Volkswagen	269,001,900	116,000	<1%	821
39. Target Corp	268,739,200	260,000	<1%	499
40. Coca-Cola	261,178,400	220,000	<1%	560
41. American Home	258,984,600	NM	NM	NM
42. Merck & Co Inc	257,531,100	76,000	<1%	1,047
43. General Electric Co	251,404,700	120,000	<1%	803
44. Kellogg Co	237,550,600	186,000	<1%	617
45. Anheuser-Busch Cos Inc	236,352,100	114,000	<1%	840
46. American Express Co	232,721,200	1,400,000	1%	122
47. Nestle Sa	232,511,300	120,000	<1%	811
48. IBM Corp	230,785,900	1,040,000	<1%	171
49. K Mart Corp	227,571,000	3,800,000	2%	41
50. JC Penney Co	224,824,700	1,520,000	1%	110

Source: Morgan Stanley Dean Witter, AdRelevance, Competitive Media Reporting

** Internet Advertising spending is based on rate card spending discounted 80%*