

IV. The Interactive Advertising Experience

- A. Introduction 54
- B. Dollar/Volume Projections 56
- C. Comparing Web Advertising to Traditional Media Spending 59
- D. The Effect of the Web On Television 60
- E. The Promise of eCommerce 63
- F. How Advertising Appears on the Web 64
- G. Attitudes Toward Online Advertising 69

Editor's Note: In many respects, interactive television is following in the mighty footsteps of the internet. Many of the experiences of the online world may be applicable to ITV development, including interactive advertising. To better understand the online advertising marketplace, eMarketer has provided the following analysis, based upon recent marketplace research in its new eAdvertising Report.

Prospects for Interactive Television

The World of Interactive Services

The ITV Rollout

The Interactive Advertising Experience

The Global Outlook

A. Introduction

The internet continues to grow rapidly but the internet “phenomenon” is growing even faster, as the range of activities moving to the web, the pace of technology evolution, and the exploding dollar value of online transactions create exponential effects. Fueling the growth of e-commerce is web advertising, with a spending increase of 116% in 1999 alone.

Beyond the raw numbers there are signs that the web advertising market is now approaching its “teen-age years”. Advertisers are crossing through the threshold engaging in experimentation and self-discovery (i.e., “What is my business doing on the web anyway?”). There are signs of maturity, too, as they integrate their advertising efforts across multiple media, develop more sophisticated e-commerce offers and enhance interactivity to leverage faster bandwidth. Finally, a level of responsibility is emerging, evident in the concerns with privacy and protecting consumer information.

Outside forces are also at work with the emergence and proliferation of wireless internet connectivity, the “always on” experience that is afforded by xDSL and cable modems, the popularity of user-to-user recommendations and the movement of traditional merchants into cyberspace where they are developing clicks-&-mortar e-commerce initiatives.

The merger of American Online with Time Warner is symbolic of the migration of internet advertising and e-commerce into the mainstream. This will generate a greater number and variety of advertising opportunities.

“We anticipated a market catalyst. Who could have expected it to come so early in the new millennium or for it to be such an extraordinary deal, as is the AOL Time Warner deal? It will trigger more deals and will speed up the development of interactive and digital TV. More importantly, it will accelerate the shift of marketing budgets from direct marketing and sales promotion to brand advertising. Media companies like AOL Time Warner and media specialists that adapt most rapidly to this new interactive, integrated world will be the big market winners.”
— Jack Myers, The Myers Group

“AOL’s proposed merger with Time Warner probably signals a number of things, such as a much broader array of content and commerce companies out there on the web, and the importance of the web as a distribution platform.”
— Tim Koogle, CEO, Yahoo

Rapid growth of vertical market sites - in both the business to business and business to consumer markets - has multiplied opportunities for advertising with "built-in" targeting. These vertical sites, as well as challengers from other quarters are threatening general portals.

At the same time, the controversy over DoubleClick's use of information gathered from web surfers has put some critical issues on the front burner — and consumers will largely dictate the outcome.

One thing remains constant: e-advertising holds out the promise of becoming the ultimate, targeted communications vehicle. However, realizing this potential continues to be a struggle. The development of online measurement tools continues to be a challenge, as is the slow evolution of optimal models, techniques and strategies for marketing on the web. In response, new approaches such as e-mail, personalization, affiliate marketing and web-based promotions continue to grow and evolve.

"There are three primary trends affecting media and advertising: interactivity, integrated marketing and return on investment. Individually, they represent a radical alteration of the industry. Together, they make everything we know outdated and irrelevant. Those who ignore these trends will be doomed to exist in a commoditized media world of eroding audiences and shrinking margins." — Jack Myers, The Myers Group

"The industry is maturing to the point where we are not going to see quantum leaps."

— John Nardone, President, Modem Media, Poppe Tyson

Like a good Darwinian ecosystem, new variations, mutations and developments are emerging in the online ad industry. While it is not possible to say the industry has reached maturity, it is certainly grappling with puberty. The industry is working with incredible energy to come up with a panorama of responses to objectives, issues and problems, but it still does not understand itself or its environment very well. Just like a teenager, it needs to find itself. The major barriers to online ad growth have not changed in the last year, but the list continues to grow. The newest addition: the controversy over the use of user information for personalization and targeting.

Prospects for Interactive Television

The World of Interactive Services

The ITV Rollout

The Interactive Advertising Experience

The Global Outlook

Barrier

1. Not all target audiences are wired (at least not to the same degree)
2. The online audience is highly fragmented
3. Branding is relatively weak on the web
4. Bandwidth problems limit creative options
5. Internet users tend to be goal-directed, so anything that gets in their way, including ads, is often perceived as an intrusion or a bother
6. Advertisers have not cracked the problem of integrating online and offline advertising
7. Personalization technology raises issues about privacy and the use of personal information

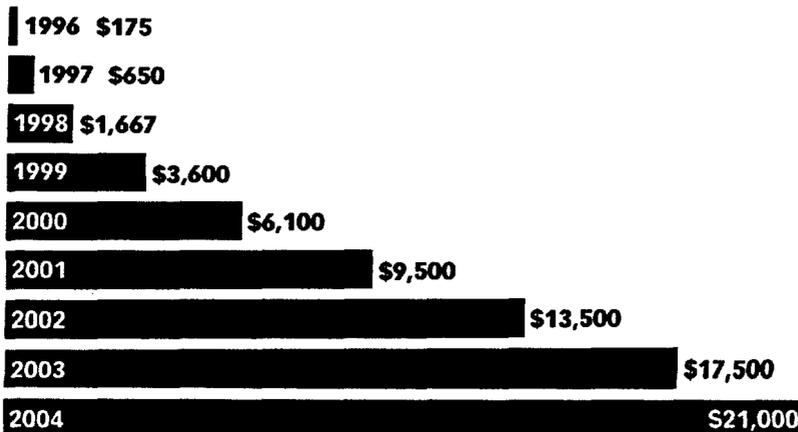
Development

- The internet continues to expand, attracting new users and approaching a "mass media" make-up
- Vertical sites are creating markets of web surfers with common interests
- A lot of money is being spent to understand and improve web branding
- DSL, cable and convergent technologies are progressing, though more slowly than originally projected
- Internet marketers are getting more savvy about how they communicate with online consumers (e.g., relationship marketing); and users are becoming increasingly interested in using the web for entertainment
- Advertisers are aware of the need for integration, and a few are already doing it
- Consumers, government authorities, marketers and other interested parties are pursuing discussions that will lead to eventual resolution

B. Dollar/Volume Projections

US companies spent \$3.6 billion on web advertising in 1999, and spending will increase to \$21 billion by 2004.

US Online Advertising Spending, 1996-2004 (Millions)



Source: eMarketer, 2000

Web advertising grew at 116% in 1999. While the rate of growth will slow over the next several years, it will still be 69% in 2000 and 56% in 2001. By 2004, the growth rate will shrink to 20%.

Growth Rates for US Online Advertising Spending		
Year	Millions	Growth vs. Previous Year
1996	\$175	
1997	\$650	271%
1998	\$1,667	156%
1999	\$3,600	116%
2000	\$6,100	69%
2001	\$9,500	56%
2002	\$13,500	42%
2003	\$17,500	30%
2004	\$21,000	20%
Avg. Annual Rate		95%

Source: eMarketer, 2000

The year-to-year increases seen in 1997 and 1998 are not sustainable. Inevitably, as the base gets bigger, the rate of growth will slow. The rate of growth in online advertising will also be affected by the following trends:

- Advertisers and their agencies will continue to tinker with critical issues such as measurement, standards and ROI evaluation
- Web advertising will be embraced by large consumer marketing companies and attain a more strategic position within corporate marketing budgets
- The industry will stabilize and mature

In the race to build awareness, establish online brands and drive site traffic, online marketers will continue to divert significant chunks of their "internet" marketing budgets to corporate website development and offline media. For most online marketers, their websites, and the consumer experience of interacting with them - not banner ads - will act as the primary branding medium, and possibly the primary response mechanism, for products and services marketed online.

Forrester Research has projected that while online advertising spending will grow to reach \$12.6 billion by 2002, spending on corporate website development could easily top \$18 billion in the same year

The following chart summarizes online ad spending projections from selected research firms for the years 1997 - 2005.

Prospects for Interactive Television

The World of Interactive Services

The ITV Rollout

The Interactive Advertising Experience

The Global Outlook

Comparative Estimates of US Web Advertising Spending Projected Through Year 2004, (Millions)

Source	1997	1998	1999	2000	2001	2002	2003	2004
Coen/McCann Erickson	\$600	\$1,050	-	-	-	-	-	-
MarketAdvisor May 99	-	\$1,500	-	-	-	-	\$9,333	-
Aberdeen Group	na	-	-	\$5,100	-	-	-	-
Veronis, Suhler & Assoc.	\$906	\$1,900	\$3,300	\$4,500	\$5,700	\$6,900	\$8,200	-
InterMedia/CMR	\$545	\$1,034	\$1,910	-	-	-	-	-
Simba	\$597	\$2,100	\$5,500	\$6,500	\$7,100	-	-	-
Forrester Research	\$550	\$1,300	\$2,800	\$5,400	\$8,700	\$12,600	\$17,200	\$22,200
IDC	\$550	\$1,200	\$2,000	\$3,300	-	-	-	-
Giga Info. Group	-	\$1,140	\$2,340	\$3,950	\$5,770	\$8,000	-	-
Yankee Group	\$800	\$1,500	\$2,400	-	-	-	-	-
Myers Group	-	\$2,000	\$2,400	\$4,320	\$6,480	\$10,368	\$16,589	\$23,224
Lazard Freres	-	-	\$3,453	\$5,493	\$8,028	\$11,057	\$15,480	-
Jupiter Communications	\$940	\$2,100	\$3,500	\$5,000	\$6,700	\$8,800	\$1,500	-
eMarketer	\$650	\$1,667	\$3,600	\$6,100	\$9,500	\$13,500	\$17,500	\$21,000
Internet Stock Report	-	\$1,200	\$3,600	\$8,100	\$11,300	\$15,900	-	-
IAB (1)	\$906	\$1,920	\$4,621	\$7,740	\$12,487	\$18,350	\$25,394	-
Meckler-Media	-	\$1,200	\$4,400	\$11,200	\$16,300	\$22,900	-	-
ActivMedia	\$400	\$1,700	\$4,700	\$11,200	\$23,500	\$43,300	-	-

(1) Reflects eMarketer's statistical extrapolation of historical data reported by the IAB from 1st quarter 1996 through 3rd quarter 1999 (all predictions are within 95% confidence level). Sources: eMarketer, 1999, 2000; various, as noted

Why Are the Research Numbers So Different?

The wide discrepancies found in market data create confusion and frustration among web advertisers, advertising agencies, content sites and other industry watchers.

The disparity is largely due to the fact that there is a considerable amount of guesswork and interpretation involved in measuring anything to do with the internet. And internet advertising is no different.

"Ad measurement on the internet is a mess."

—Forrester Research, 1999

Beyond the obvious guesswork involved in the process of forecasting, three factors explain the differences seen in the published figures: different definitions, different methodologies and hidden biases.

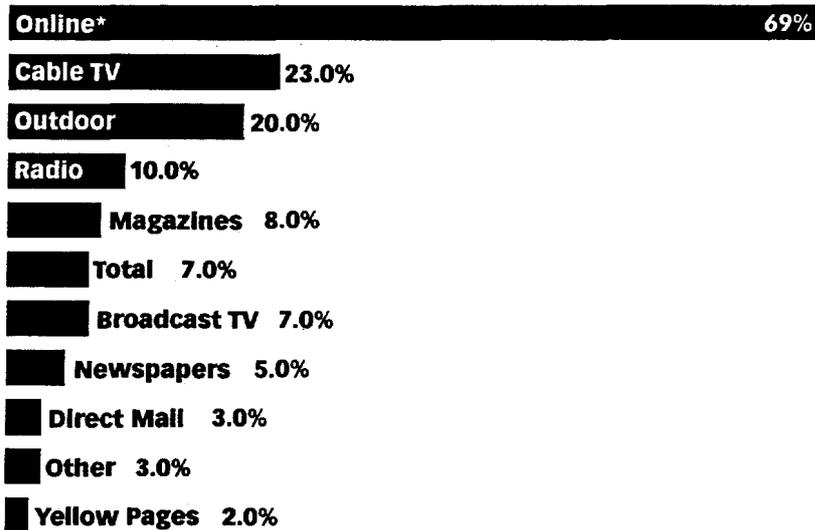
C. Comparing Web Advertising to Traditional Media Spending

Rates of Growth

Internet growth rates, because they start from a zero base, are astronomical at first, but inevitably they slow as the base grows. The chart below contrasts spending growth rates on the internet versus traditional media during the last few years. The internet grew at a faster rate than any other advertising media in 1998.

eMarketer expects growth in web advertising to be 69% in the year 2000.

Growth in Advertising Spending, by Medium (2000 vs. 1999)

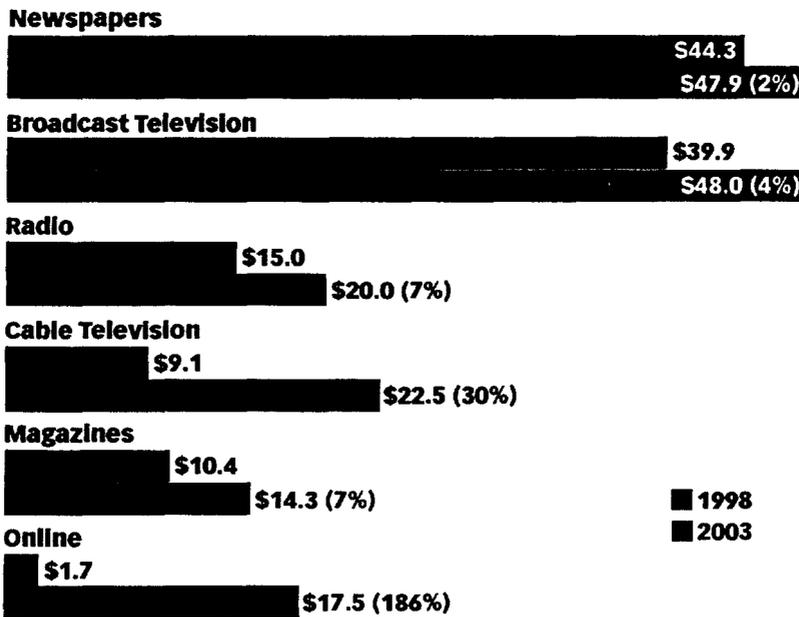


Source: Myers Group, 1999; *eMarketer, 2000

Over the 1997-2003 period, internet advertising will grow at an average annual rate of 186%. By contrast, the fastest growing traditional media will be cable TV, growing at an annual rate of 30%.

Prospects for Interactive Television
 The World of Interactive Services
 The ITV Rollout
 The Interactive Advertising Experience
 The Global Outlook

1998 - 2003 Advertising Spending, by Media Type, In Billions (Avg. Annual Change)



Sources: Myers Group; 1999, eMarketer 2000

Jupiter Communications also expects the growth of online and, to a lesser extent, cable TV to outpace other advertising vehicles between 1998 and 2002.

D. The Effect of the Web On Television

The effect of web surfing on TV viewing habits has been analyzed, but without definitive conclusions. Current Nielsen Media Research studies (adjusted for a "pre-existing" tendency of web users to watch less TV), peg the net's deleterious effect on television to be in the 10 - 15% range. This is the latest of many studies attempting to document the web's impact on TV watching. In 1998 Nielsen found that internet-connected households spent about 15% less (roughly 8 hours) averaged over the entire week.

A later Nielsen study found that households that are now online (i.e., "early adopters") have always watched less television. It attributed 80% of the difference in TV viewing time to persistently lower interest in TV that began long before the internet. The remaining 20% was, in fact, time taken away from TV by the internet.

eMarketer's most recent data (based on our definition of "active" web users) indicates that time spent on the internet is now approaching 25% of TV. Although the internet has many more available channels (or sites), the number of channels/sites actually used is not too different from TV. Note that our figure for average internet usage of 6.7 hours per week is based on the universe of web users, not total adults in the US population.

Comparing Household Television Usage vs. Internet Usage

	TV	Internet
Households Connected, in Millions	99	34
Avg. Time Spent per Adult per Week	28 hours	6.7 hours
Avg. Channels/Sites Received	57	Millions
Avg. Channels/Sites Used	13	14

Sources: Television data from Nielsen Media Research, 1999; internet data from eMarketer, 2000 (reflects eMarketer's definition of "active web users")

Nielsen Media Research also looks at television versus internet usage, although their figure for time spent online is averaged across all adults, not just internet users.

Media Habits in the Home, According to Nielsen

	TV	Internet
Households connected	99 million	38 million
Avg. time spent per adult per week	28 hours	1 hour
Avg. Channel/sites received	57	millions
Avg. Channel/sites used	13	12

Source: Nielsen Media Research, 1999; eMarketer, 2000 (reflects eMarketer's definition of "active web users.")

As more users from the mainstream of society have become web surfers, the average effect on TV watching has dropped from 15% to 10%, though the data has fluctuated significantly.

The Net's Effect on Television Viewership

Early 1998	15%
Late 1998	13%
July 1999	13%
September 1999	10%

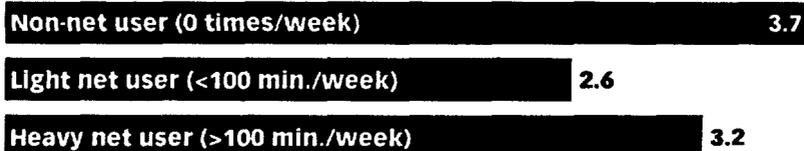
Source: Nielson Media Research, 1999

A 1998 audit of media usage patterns by International Demographics, Inc., found that heavy users of the internet are also heavy users of television, and that light net users generally are also light viewers of TV:

- Prospects for Interactive Television
- The World of Interactive Services
- The ITV Rollout
- The Interactive Advertising Experience
- The Global Outlook

Heavy Net Users Are Heavy TV Users

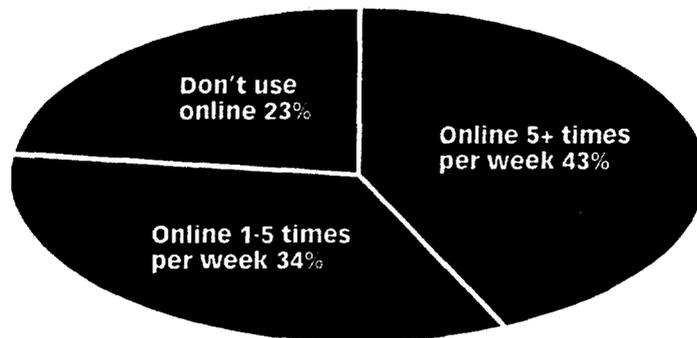
Hours spent on TV per day



Source: International Demographics, Inc., 1998

Similar conclusions came from the Myers Group, which found that of TV users who own computers, the largest group — 43% — are the heaviest web surfers, and go online five or more times per week.

Online Use by TV Users Who Own Home Computers, 1999



Source: Myers Group, 2000

Despite worries about the internet, TV use continued to rise in 1999. The prime-time HUT (households using TV) rose 2% in 1999 and total prime-time viewing audiences jumped 3%, according to a Turner Entertainment Research analysis of full-year data from Nielsen Media Research.

Although the major broadcast networks continued to experience prime time ratings erosion, the rate of erosion slowed during 1999. Basic cable continued to register strong gains, maintaining a double-digit household delivery growth rate of 10%.

Comparative Household Delivery of TV, 1998 & 1999 (Millions)

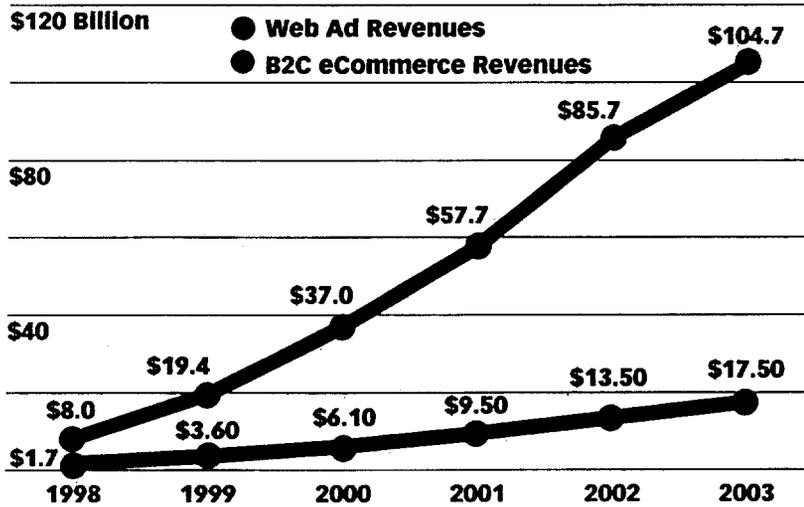
	1998	1999	Change
Broadcast Networks	31.2	31.4	+1%
All Cable	26.3	29.0	+10%
PBS	1.9	1.9	-
Independents	6.6	7.0	+6%
HUT	56.9	58.2	+2%
Total Viewing Audience	65.3	67.3	+3%

Source: Nielsen Media Research, 2000

E. The Promise of eCommerce

For a final perspective on web advertising, by comparing web advertising revenues with e-commerce sales, including both business-to-business and business-to-consumer, it is clear that e-commerce will continue to be the mother-lode of net-based revenues.

Comparison of Web Advertising vs. Consumer eCommerce Revenues, 1998 - 2003 (Billions)



Source: eMarketer, 2000

For more data and analysis on e-commerce, see eMarketer's eBusiness and eRetail reports, or visit the eMarketer website at www.emarketer.com

Prospects for Interactive Television
 The World of Interactive Services
 The ITV Rollout
 The Interactive Advertising Experience
 The Global Outlook

F. How Advertising Appears on the Web

By Ad Format

There are four general types of online ad space formats used by web advertisers:

1. **Banners** - an advertising unit that typically appears at the top of a web page, but can also appear on the bottom or sides of a page
2. **Sponsorships** - also referred to as side frames, these are advertisements on a frame web page that are positioned along the side of the requested content (ideally, the sponsorship message is related to the adjoining content)
3. **Interstitials** -full screen ads that appear on web browsers while a new page is loading
4. **eMail** - either text or HTML-based delivery of e-mail messages containing commercial messages
5. **"Rich Media"** - uses the integration of animation, sound, interactivity and even e-commerce, within the space typically filled by a GIF banner ad

There are many variations within each format, as well as a lack of agreement on uniform definitions, which makes measurement and comparisons across different research firms difficult.

The banner ad (typically "468 x 60") is still the standard advertising form on the web, accounting for half (50%) of all online ad dollars placed in 1999. Sponsorships were the second most popular form with 38%, and interstitials made up 5%. In 1999, e-mail emerged as a significant category, capturing a 3% share.

By the end of 2003, banners will decline to 41% of web ad sales, with strategic sponsorships taking 30%. eMail will grow to 11%, interstitials will have 8%, and new formats will take 10%.

Distribution of Web Advertising Dollars, by Ad Format, for 1998-2003

	1998	1999	2000	2001	2002	2003
Banners	52%	50%	47%	43%	42%	41%
Sponsorships	40%	38%	37%	35%	32%	30%
eMail	1%	3%	5%	8%	10%	11%
Interstitials	3%	5%	6%	6%	7%	8%
Other/New	4%	4%	5%	8%	9%	10%

Source: eMarketer, 2000

Click-Through Rates

The use of banner ads to increase brand recognition, drive site traffic and generate sales leads is hampered by the fact that most ad banners don't get clicked on. Meanwhile, many analysts argue that click-through is a meaningless and inappropriate metric for web advertising.

One reason that click-through rates for banner ads are so low is that over half of all net users - 52% - never click on them. Researchers disagree on the exact number, but the range among researchers is between 50 - 60%.

Comparative Estimates: % of Internet Users Who Never Click on Banner Ads, 1999



Sources: eMarketer, 2000; various, as noted

Why are CTRs Falling?

- Too many ads chasing too few viewers
- The novelty and thrill are gone
- Complexity of the page
- Surfers are evolving into Searchers
- Users are more discriminating

Click-throughs are also falling because banner ads interrupt the web user who is typically engaged in a search for specific information.

Of course, the likelihood of a consumer clicking on a banner depends significantly on what they're doing when they see it. Banners that are targeted and well-matched to users activities and interests do much better at eliciting a response.

New Users' Likelihood of Clicking On Ad Banners, by Activity

	Unlikely	Likely	Extremely Likely	Likely/Ext. Likely
Reading News	55%	39%	6%	45%
Researching Products	35%	59%	9%	68%
Shopping for Products	29%	65%	6%	71%
Using a Search Engine	13%	81%	6%	87%

Source: Forrester Research, 1999

- [Prospects for Interactive Television](#)
- [The World of Interactive Services](#)
- [The ITV Rollout](#)
- [The Interactive Advertising Experience](#)
- [The Global Outlook](#)

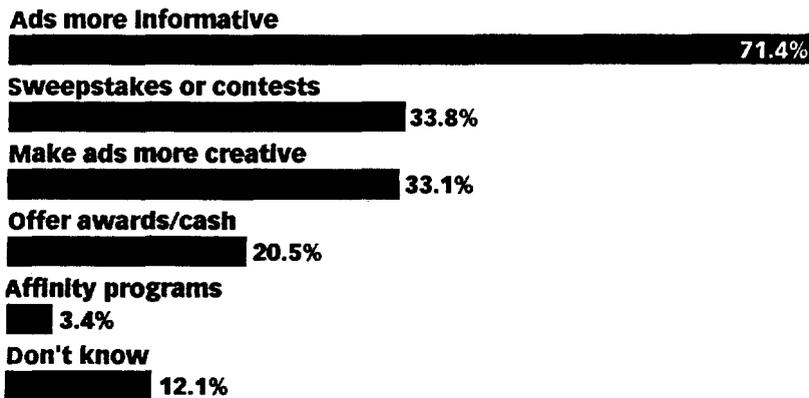
NetSmartAmerica.com found that integrating advertising with editorial content (e.g., via content sponsorships on portals) makes the advertising almost twice as effective as stand-alone banners. In their study, 47% of web surfers visited new websites as a result of content on a portal versus 26% from a banner ad. This would argue that strategic sponsorships can be effective at driving site traffic.

“The key to success is strategic placement. Make sure that your product has an affinity with the site and the content you’re sponsoring. And web surfers are looking for helpful content...they’re not going to sit through an infomercial. The content should have real perceived value.” — Bernadette Tracy, President, NetSmartAmerica.com

Can Click-Through Rates Be Increased?

Surveys have shown that higher click-throughs can be achieved by adding more information, sweepstakes or contests, or making ads more creative. In an NFO Interactive study, for example, over 71% of respondents emphasized the importance of information, over twice as many as favored any other technique.

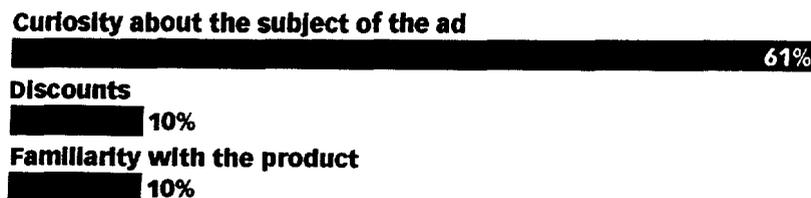
What Would Make Internet Consumers Click?



Source: NFO Interactive for Jupiter Communications, 1999

In another survey, PC Data identified curiosity about the subject of the ad as the primary motivator of banner clicks. Clearly, relevance is a key factor here.

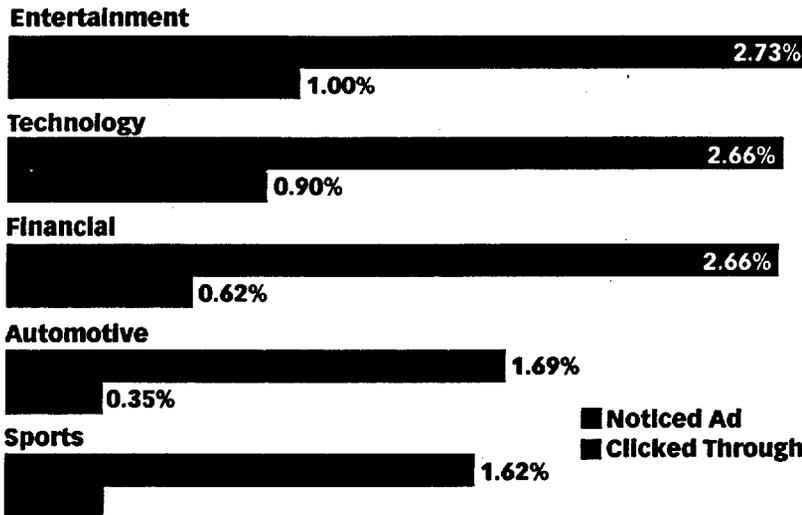
What Makes Visitors Click? (on Banners)



Source: PC Data, 1999

Web users are apparently more likely to notice and click on ads promoting entertainment, technology or financial-related products and services. NPD surveyed 2,893 online users and found clear variations in response depending on subject matter.

Effect of Ad Content Type on Click-Through Rates



Source: NPD Online, May 1999

Continuing Research into the Subtleties of Click-Through Rates

A prevalent theory asserted that after three ad exposures, clicks fall off dramatically, but an AdKnowledge study concluded that no blanket statement can be made about frequency and response. Other variables, such as content and context, also play a role. Of four cases, responses declined in two, but the other two sites exhibited different patterns. For one specialty content site, the click-through rate remained steady, while one portal's click-through rate rose dramatically on the fifth ad exposure.

% of Web Users Clicking at Nth Ad Exposure

Site	1st	2nd	3rd	4th	5th
Portal A	2.14%	1.41%	1.12%	0.93%	0.83%
Specialty Content Site A	2.84%	3.14%	3.01%	3.46%	3.08%
Specialty Content Site B	4.07%	2.60%	1.96%	1.57%	1.46%
Portal B	3.16%	2.05%	1.26%	1.07%	2.14%

Source: AdKnowledge, 1999

Of course, metrics of success depend heavily on the objectives of the advertising campaign. According to the Myers Group, targeting and brand-building are at the top of marketers' lists.

Prospects for Interactive Television

The World of Interactive Services

The ITV Rollout

The Interactive Advertising Experience

The Global Outlook

What Factors Do You Consider in Deciding to Use Online Advertising?



Source: Myers Group, 1999

Measuring ROI

Currently, there are four common methods to measure return on investment on the web.

Online Advertising ROI: Four Common Methods

ROI Type	Symbol	Definition
1. Advertising-to-sales ratio	A/S	Total cost of web advertising divided by online sales during the same period.
2. Click-through rate	CTR	Calculated by dividing the number of click-throughs by the number of ad impressions served.
3. Cost-per-lead	CPL	Advertiser pays based on how many consumers participate in a contest or fill out a literature request form.
4. Cost-per-sale	CPS	Advertiser pays based on how many consumers actually buy something as a direct result of the banner ad/promotion.

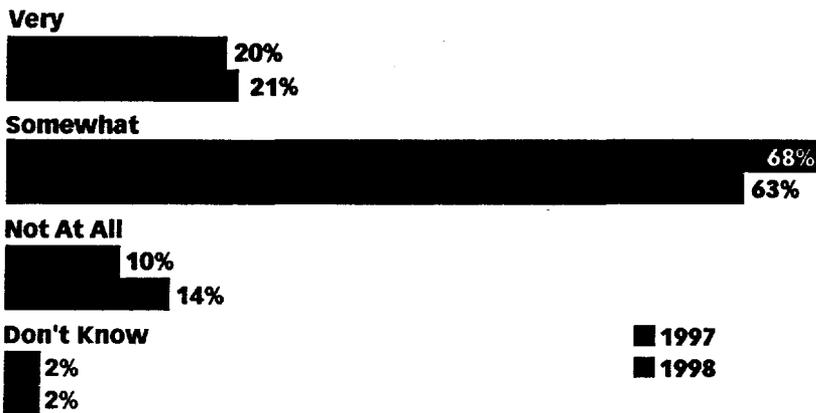
Source: eMarketer, 1999

Jupiter Communications has suggested another series of metrics: incremental revenue, incremental customers/users, revenue, total customers/users and profitability. Their data shows that pure-play internet companies and traditional businesses, or "incumbents," prioritize the use of metrics differently. Note that traditional firms value profitability higher than do online-only businesses.

G. Attitudes Toward Online Advertising

According to Advertising Age's sixth annual Interactive Media study conducted in October 1998 (via Market Facts TeleNation), more than one-in-five (21%) internet users thought online advertising was "very acceptable." Another 63% thought it was "somewhat acceptable" (which reflects the fact that most people tend to view web banners as tolerable background noise). However, the percentage of users who feel that web advertising is "not at all acceptable" edged upwards to 14% from 10% the previous year.

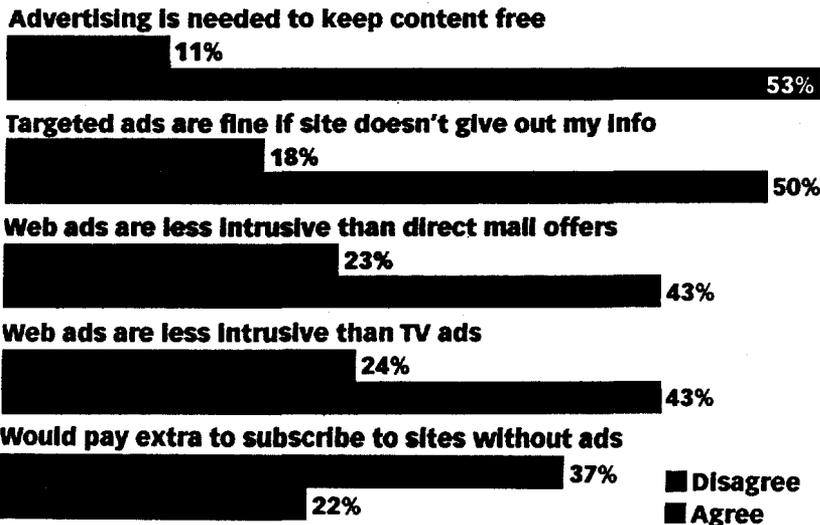
How Acceptable Is Online Advertising?



Source: Market Facts TeleNation, 1998

A 1998 INTECO survey showed that internet users apparently understand the role of online ads in supporting free content, yet they remain wary of privacy/data issues.

Opinions of Web Advertising

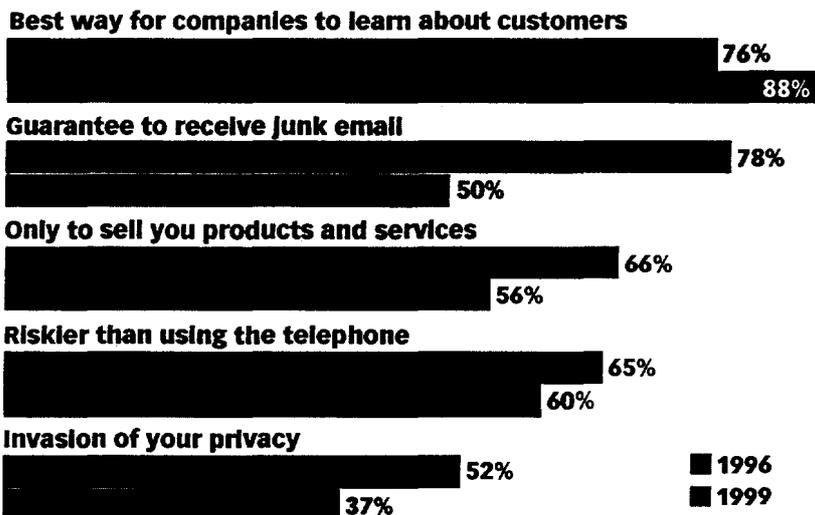


Source: INTECO, 1998

- Prospects for Interactive Television
- The World of Interactive Services
- The ITV Rollout
- The Interactive Advertising Experience
- The Global Outlook

Similarly, a 1999 survey by Cyber Dialogue found that information exchanged with websites is the best way for companies to learn about their customers, if the information collected translates to truly personalized content on the site. Compared to 1996, web surfers are less likely to feel registration is simply a guarantee to receive junk email and marketing solicitations. However, these figures are offset by security concerns: 60% still feel that submitting information online is riskier than by telephone, and over 37% feel it is a direct invasion of privacy.

Submitting Personal Information Online Is...

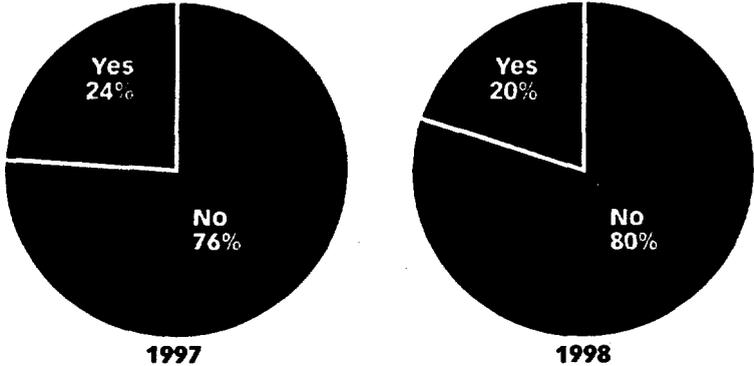


Source: Cyber Dialogue, 1999

In contrast, a Roper-Starch survey reported that almost three-fourths (74%) of Americans feel that TV commercials are a fair price to pay for being able to watch the medium for free.

A growing number of web marketers are experimenting with the concept of incentivizing consumers to view banner ads. A 1998 study from Market Facts, however, indicated that only one-fifth of the online population would appear to be candidates for this marketing ploy. In addition, using bribery to induce ad viewership is likely to reflect poorly on brand image.

Would You Agree to View Ads In Exchange for Prizes or Discounts?



Source: Market Facts TeleNation, 1998

V. The Global Outlook

A. Introduction	74
B. Europe	74
C. Asia.....	76
D. Latin America	77

Prospects for Interactive Television

The World of Interactive Services

The ITV Rollout

The Interactive Advertising Experience

The Global Outlook

A. Introduction

There's a general impression in American media circles that interactive television in Europe is far ahead of the United States. In many respects that's correct, but in others it is a case of the grass looking greener on the other side of the pond.

When looking at forecasts for ITV abroad, much depends on definitions of interactive television. Some of the forecasts appear to include digital television capacity used for internet access to the PC, which does not fit the definition of ITV being used by The Myers Group and eMarketer in this report. It's also difficult to clearly assess ITV's future internationally because in many countries, cable and satellite penetration, as well as PC penetration, is expected to grow significantly but still lag well below levels in the United States.

The following provides a look of the international ITV market by Myers using publicly available data and analysis courtesy of eMarketer, from its March 2000 eGlobal Report.

B. Europe

Interactive television services are making headway in Europe, where there is said to be more than 8 million homes with access to ITV. During Myers' ITV Forum in February, Jurgen Lembke, president of agency.com, Copenhagen, predicted that "in 2003 there will be more than forty million people in Europe" who have access to interactive television.

European Interactive Digital TV Penetration in Selected European Countries, 1999-2003 (Percent of Homes)

	1999	2000	2001	2002	2003
Germany	1%	2%	4%	5%	6%
France	10%	12%	13%	14%	15%
Italy	2%	3%	4%	5%	5%
Spain	4%	6%	7%	8%	8%
UK	3%	13%	21%	29%	34%
Total Europe	2%	4%	7%	9%	12%

Source: Morgan Stanley Dean Witter (MSDW), 1999

Much of the recent focus on European ITV has been on the United Kingdom, where British Sky Broadcasting has brought interactive television to its nearly 2 million subscribers through its Open service. (Open was formerly called British Interactive Broadcasting. Open is a different company than OpenTV, and to make matters more confusing it uses the OpenTV operating system).

While it does not offer internet services, Open gives users e-mail, banking and shopping. Open's pre-Christmas sales were estimated at over 1 million pounds a week. In order to roll out digital, Sky gave away digital set-tops, a move that put them in the red. But by the fall of 1999, analysts were estimating Sky Digital was adding 50,000 new subscribers per week. Sky's BSkyB interactive Sports launched in the summer of 1999, allowing viewers to choose camera angles, replays and statistics. There are plans to make SkyNews interactive. Open boasts that its e-commerce Woolworth's is the third largest selling shop for entertainment goods out of 800 Woolworth's U.K. stores.

Like Sky, others in the U.K. are stressing interactive television capability over internet access, even when providing a mix of the two. Cable & Wireless Communications (being acquired by another UK cable operator, NTL) is using Liberate's middleware to provide enhanced TV mixed with internet access. Using either a keyboard or remote, users can send e-mails or browse through classified car and real estate ads. Telewest, another leading cable operator also using Liberate, provides Active Digital, offering shopping, financial services, game show participation and other services. ITV services also are being introduced over-the-air via a digital terrestrial television service, On Digital, which uses UHF frequencies and a box sold at retail.

London's Channel 4 is set to begin operating E4, its multi-tiered interactive entertainment platform in November 2000. E4 has plans to build up a profile of each customer so it can target programming and advertising. When E4 develops into broadband on the internet, it has hopes of issuing viewers a smart card that would work on a pay-per-view model.

Interactive ads are popping up in various European platforms. Procter & Gamble is set to try an interactive ad for Pantene over a digital cable platform in Manchester. British Airways has an interactive campaign on Sky that allows viewers to click for more information on travel services, locations and hotels. French satellite broadcaster TPS has been running interactive advertisements for three years and claims that a phenomenal 80% of viewers who are aware of an ad's interactive option actually use it.

Procter & Gamble has launched interactive ads on the French digital platform, Television Par Satellite, which has 800,000 plus subscribers. Also in France, the most developed interactive TV advertising market, advertisers such as Nissan, Buitoni and others are running interactive advertising on Canal Satellite Numerique, which claims more than 2.2 million customers.

More than a quarter of European households now have cable TV, a figure that is forecast to rise to more than 30% by 2001. This is still less than half the 67% of households in the US connected to cable, but represents substantial growth nonetheless. While cable penetration is high in countries like Belgium and the Netherlands, much of the infrastructure reportedly needs to be upgraded to provide broadband access.

Prospects for Interactive Television

The World of Interactive Services

The iTV Rollout

The Interactive Advertising Experience

The Global Outlook

European Cable TV Penetration in Selected European Countries, 1997-2001 (Percent of Homes)

	1997	1998	1999	2000	2001
Belgium	94.0%	94.0%	94.0%	94.0%	94.0%
Germany	56.0	57.0	58.0	59.0	60.0
France	11.0	12.0	14.0	16.0	18.0
Netherlands	94.0	95.0	96.0	96.0	96.0
Norway	40.0	42.0	43.0	44.0	44.0
Spain	0.0	2.0	3.0	5.0	8.0
Sweden	40.0	40.0	41.0	41.0	41.0
UK	10.0	12.0	15.0	17.0	18.0
Total Europe	26.0	28.0	29.0	30.0	31.0

Source: Morgan Stanley Dean Witter (MSDW), 1999

In terms of subscriber numbers, it's estimated there will be 65.8 million cable and satellite homes by 2001, representing 43% of the 386 million individuals in Western Europe.

Cable & Satellite TV Subscriptions in Europe, 1998-2003 (Millions)



Source: The Strategis Group, 1999

C. Asia

According to analysis by eMarketer, several major Asian countries are moving swiftly to promote broadband cable as a means to provide internet access. While satellite television paved the way for multichannel service initially, cable is now booming in such countries as India, with a cable base of 37 million, and China, with 80 million.

According to a study done by Baskerville Communications, approximately 21% of all households with televisions in Asia are cable subscribers. Taiwan has the greatest percentage of subscribers at 74% of all television households.

Households in Asia with Cable, 1998 (Millions)

	Television HHs	Cable Subscribers	Percentage
Taiwan	5.89	4.40	74.7%
India	59.55	18.25	30.6%
New Zealand	1.25	0.35	28.0%
Hong Kong	1.85	0.48	26.0%
China	309.80	68.80	22.2%
Singapore	0.83	0.18	21.6%
Japan	42.59	6.34	14.9%
Australia	6.22	0.90	14.5%
Philippines	7.95	0.68	8.6%
South Korea	14.13	0.75	5.3%
Malaysia	3.73	0.19	5.1%
Thailand	13.69	0.28	2.0%
Indonesia	28.09	0.04	0.1%
Total	495.57	101.63	20.5%

Source: Baskerville Communications Corp

D. Latin America

Cable and satellite TV has been growing in Latin America but penetration figures vary widely by country, from more than 58% in Argentina to only 8% in Brazil (as of 1998).

Based on an analysis by eMarketer, using U.S. Census Bureau and Morgan Stanley Dean Witter figures, the following are percentages of households with cable or satellite in select Latin American countries as of 1998:

% of Households w/Cable or Satellite TV, 1998

Argentina	58.85%
Colombia	25.97%
Chile	25.69%
Mexico	10.71%
Venezuela	10.05%
Brazil	8.16%

Source: eMarketer, 2000; US Census Bureau, 1999; MSDW, 1999

Prospects for Interactive Television
 The World of Interactive Services
 The ITV Rollout
 The Interactive Advertising Experience
 The Global Outlook

Cable and Satellite TV Penetration, Total for Latin America, 1998

Population	507,503,285
# of Households (Avg. person/household=4.18)	121,412,269
# of Cable Subscribing Households	15,151,000
# of Satellite Subscribing Households	2,000,000
# of Cable or Satellite Subscribing Households	17,151,000
% of Households w/ Cable or Satellite	14.13%
# of People w/ Cable or Satellite	71,691,180
% of Population w/ Cable or Satellite	14.13%

Sources: U.S. Census Bureau 1999; eMarketer 2000; MSDW 1999

In much of Latin America, wireless technologies have made greater headway and are being looked upon as a means of enhanced communications and internet access.

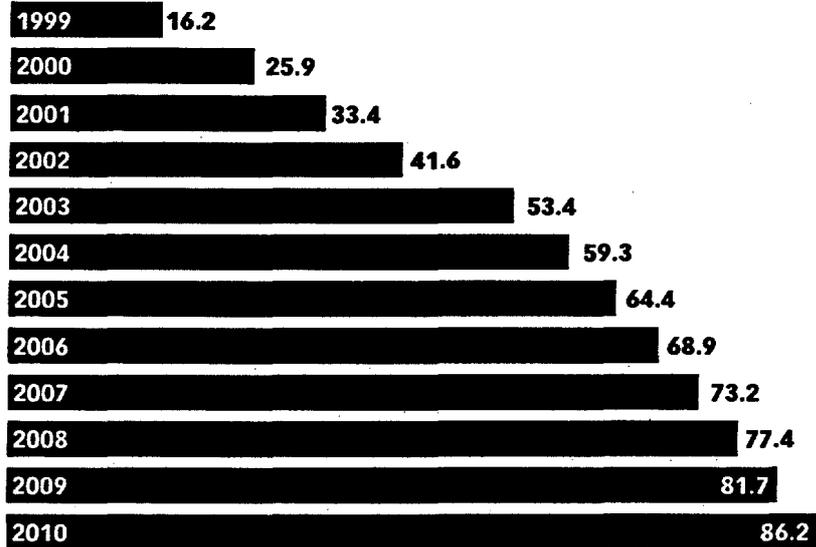
Number of Home PCs, Cable and Cellular Service in Latin America, 1999–2003 (Millions)

	1999	2000	2001	2002	2003
Home PCs ¹	5.0	6.1	7.2	8.6	9.8
Cable Subscribers	16.2	25.9	33.4	41.6	53.4
Cellular Subscribers	27.4	54.3	74.4	88.4	101.1

Source: 1) IDC, Strategy Corp., Solomon Smith Barney; all other data via Solomon Smith Barney.

Nonetheless, cable is expected to grow significantly this decade, adding to the prospects for internet and ITV services.

**Number of Cable TV Subscribers in Latin America,
1999–2010 (Millions)**



Source: Salomon Smith Barney, 1999

Summary & Conclusions

Though still in a nascent state, interactive television is demonstrating significant progress on a variety of fronts. Buoyed by developments in digital technology that have increased functionality and decreased costs, ITV services are poised to be distributed on a widespread, economically scalable level. As demonstrated by the results of Myers' Prospects for ITV Survey of high-level media executives, the industry expects that ITV will reach a critical mass of users and blossom into a multi-billion dollar business over the next 3-5 years. The Myers Group and others foresee a major upsurge in ITV subscription, advertising and e-commerce revenue by mid-decade. ITV has gained support across a broad spectrum of existing media companies while new entrants and investments continue to pour into the business. These players, soon to be joined by convergence heavy-weight AOL Time Warner, will drive ITV with resolute collective force. Perhaps more important, initial U.S. trials and service launches, as well as promising ITV results in Europe, have bolstered confidence that when ITV arrives, the consumer is there.

Despite this optimism, many of the hurdles that have long stymied ITV still must be overcome. On the technology front, there still is no singular platform or interface/application combination that is being deployed with enough ubiquity to guarantee any ITV service's financial success. Technical standards and incompatibility remain as issues, as the Myers survey respondents note. Efforts to resolve these issues through governmental bodies or industry consortiums have provided some remedies, but widespread industry acceptance is difficult to achieve. However, recent developments among major software and middleware providers, in terms of merger and acquisition activity and deals with distributors, indicate that the marketplace will provide adequate platform solutions. Coupled with the coming deployment of advanced digital set-top boxes and other devices, distributors will be able to provide a launching pad for rapid deployment of enhanced TV, video-on-demand or internet over TV, the latter of which will be joined by advances in online media streaming that will further broaden the current concept of ITV.

continues

While the technological foundation is being built, attention must turn to important issues surrounding content applications, interactive advertising and e-commerce (or its buzzword descendant, t-commerce). It remains to be seen what combination of interfaces and applications will truly make ITV a unique experience and achieve the goals of giving consumers choice, convenience and control. The advertising industry is taking keen interest in interactive advertising and t-commerce, yet it needs workable formats, conventions and business models. The section in this report by eMarketer, *The Interactive Advertising Experience*, shows how the online advertising business, though growing by leaps and bounds, is grappling with such issues as measurement disagreements, research discrepancies, declining click-through rates and uncertain consumer attitudes toward online advertising. These are the types of issues that the ITV business has barely begun to tackle.

This year will continue to be highlighted by further dealmaking, investments (depending on the fickleness of the stock market, of course), new entrants, technological advancements, media convergence and service deployments. All of these developments are building momentum toward a rapid rollout of ITV services and associated businesses in the years ahead. There are still barriers to overcome and issues to be sorted out, but ITV has successfully taken the necessary initial steps to achieve its long-held promise.

It is the hope of The Myers Group and eMarketer that this jointly published report will promote a better understanding of the ITV marketplace. No report can fully incorporate all of the developments, data and viewpoints in this rapidly changing environment. If you have additional information or opinions that you wish to add for future analyses, we invite you to contact us.

Craig Leddy
SVP-Market Analysis
The Myers Group
120 W. 45th St.
NY, NY 10036
craig@myersreport.com

Brian Gilman
Senior Technology Analyst
eMarketer
821 Broadway
New York, NY 10003
bgilman@emarketer.com

Index of Charts

Section I: Prospects for Interactive Television

A.

Prospects for ITV	8
-------------------	---

B.

ITV Forecast: Consumers	10
Percent of Digital Cable Subscribers Who Would Definitely Use the Following Services	12

C.

ITV Forecast: Revenues	13
ITV Revenues, 1999-2006, (millions)	13
Interactive TV Revenues, 1999-2004, in Millions of Dollars	15

D.

Revenue Potential for ITV Services	16
------------------------------------	----

E.

Biggest Obstacles to ITV	18
--------------------------	----

F.

Greatest Beneficiaries of ITV	20
-------------------------------	----

Section II: The World of Interactive Services

A.

Slicing the ITV Market	25
ITV Today Covers a Range of Services and Companies	25

B.

AOL's Importance to Convergence	28
---------------------------------	----

E.

Market Awareness of ITV Services	34
----------------------------------	----

F.

Market Perception of ITV Services	35
-----------------------------------	----

Section III: The ITV Rollout

B.

% of Subs Served by 2-Way Cable Plant	40
US Cable Bandwidth by % Capacity Increase	40
Cable Plant Status, % of Service Area with Two-Way Capability, 1997-2000	41
US Cable Bandwidth by Subscriber Count (millions)	41
Digital Set-Top Projections, 2000-2003	42

C.

Cable Modem Projections, 2000-2003	43
Customer Costs of Various Access Technologies	44
Cable Modem Ready Households as a % of Cable Passed Houses, 1998-2003 (millions)	44
US Cable Modem Market, 1999-2003 (millions)	45
Comparative Estimates: US Cable Modem Market, 1998-2003 (millions)	45
US DSL Market, 1998-2003 (millions)	46
Comparative Estimates: US DSL Market, 1998-2003 (millions)	47

D.	
Future Environment for Advertisers, 2000-2005	48
E.	
Advanced TV Set Market, 1999-2003 (millions)	49
Worldwide Information Appliance Shipments (millions)	50
Sales of Home Entertainment Devices, 1999-2004 (millions)	50
F.	
Satellite vs. Cable Modem Subscribers, 2000-2003 (millions)	51
Section IV: The Interactive Advertising Experience	
B.	
US Online Advertising Spending, 1996-2004 (millions)	56
Growth Rates for US Online Advertising Spending	57
Comparative Estimates of Web Advertising Spending Projected Through Year 2004, (Millions)	58
C.	
Growth in Advertising Spending, by Medium (2000 vs. 1999)	59
1998-2003 Advertising Spending, by Media Type, in Billions Avg. Annual Change)	60
D.	
Comparing Household Television Usage vs. Internet Usage	61
Media Habits in the Home, According to Nielsen	61
The Net's Effect on Television Viewership	61
Heavy Net Users Are Heavy TV Users	62
Online Use by TV Users Who Own Home Computers, 1999	62
Comparative Household Delivery of TV, 1998 & 1999 (Millions)	63
E.	
Comparison of Web Advertising vs. Consumer eCommerce Revenues, 1998-2003 (Billions)	63
F.	
Distribution of Web Advertising Dollars, by Ad Format, for 1998-2003	64
Comparative Estimates: % of Internet Users Who Never Click on Ad Banners, 1999	65
New Users' Likelihood of Clicking on Ad Banners, by Activity	65
What Would Make Internet Consumers Click?	66
What Makes Visitors Click? (on Banners)	66
Effect of Ad Content Type on Click-Through Rates	67
% of Web Users Clicking at Nth Ad Exposure	67
What Factors Do You Consider in Deciding to Use Online Advertising?	68
Online Advertising ROI: Four Common Methods	68
G.	
How Acceptable In Online Advertising?	69
Opinions of Web Advertising	69
Submitting Personal Information Online Is...	70
Would You Agree to View Ads in Exchange for Prizes or Discounts?	71

Section V: The Global Outlook

B.

European Interactive Digital TV Penetration in Selected European Countries, 1999-2003 (Percent of Homes) 74

European Cable TV Penetration in Selected European Countries, 1997-2001 (Percent of Homes) 76

Cable & Satellite TV Subscriptions in Europe, 1998-2003 (millions) 76

C.

Households in Asia with Cable, 1998 (millions) 77

D.

% of Households w/ Cable or Satellite TV, 1998 77

Cable and Satellite TV Penetration, Total for Latin America, 1998 78

Number of Home PC's, Cable and Cellular Service in Latin America, 1999-2003 (millions) 78

Number of Cable TV Subscribers in Latin America, 1999-2010 (millions) 79

About The Myers Group

The Myers Group, LLC, formed in 1997 by veteran industry economic consultant Jack Myers, is a leading publisher of market news, insights and intelligence for the global media industry. Based in New York, Myers provides primary research, market reports, consulting and relationship-building services for well-known companies in the cable, broadcasting, online, advertising and print media. Myers publishes The Myers Report daily newsletter, providing quick media industry news and recent research highlights, and regular Myers Mediaenomics reports, offering in-depth market analysis and aggregated data to help media executives make business investment decisions. Topics include marketing, advertising, branding, technology, financial forecasts and strategic development. Myers recently established the Forum for Interactive Television Development to advance the state of the ITV industry by providing a forum for proactive initiatives. For more information, contact Myers at 212-764-5566.

About eMarketer (www.emarketer.com)

New York-based eMarketer, recognized worldwide as the authority on business online, provides e-telligence for business. The company's comprehensive reports aggregate, filter, organize and analyze the statistics, news and information businesses need to succeed on the web.

eMarketer also provides extensive analysis and data on the e-commerce industry on an award winning website, www.emarketer.com, visited by over 135 countries around the world. The company's news articles, market projections and analytical commentaries have been featured by hundreds of authoritative news organizations and business publications worldwide. For information, contact eMarketer at 212-677-6300.