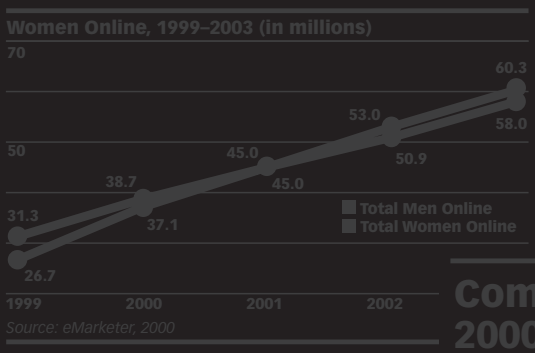
The eMarketer Difference:

A look behind eMarketer's methodology and the process for developing its market estimates and projections.



Comparative Estimates: B2B eCommerce 2000–2004 (in billions)

	2000	2001	200
eMarketer	$226	$449	$84
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Goldman Sachs & Co.	$357	$740	$1,3
Ovum	$218	$345	$54

Source: eMarketer, 2001; various, as noted

eMarketer™

The World's Leading Provider of eBusiness Statistics

Report Code EM-2063

4 Questions to Ask Yourself About e-Business Statistics:

1. **Who is the source?**
2. **What do they stand to gain?**
3. **What was their methodology?**
4. **How do the results compare with the existing body of evidence?**

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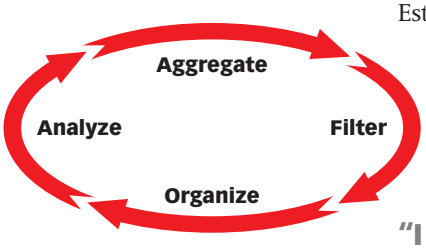
Who is eMarketer and What Does it Offer?



Established in 1996, eMarketer is a New York-based firm that aggregates, filters, organizes and analyzes information, statistics and trends about every aspect of the internet and e-business. It provides this service in the form of:

- Comprehensive reports
- e-mail newsletters
- Online content (www.emarketer.com)
- A database of charts and statistics (eStat Database)

"I think eMarketer reports are extremely useful and set the highest standards for high quality, objective compilation of often wildly disparate sources of data. I rely on eMarketer's research reports as a solid and trusted source."

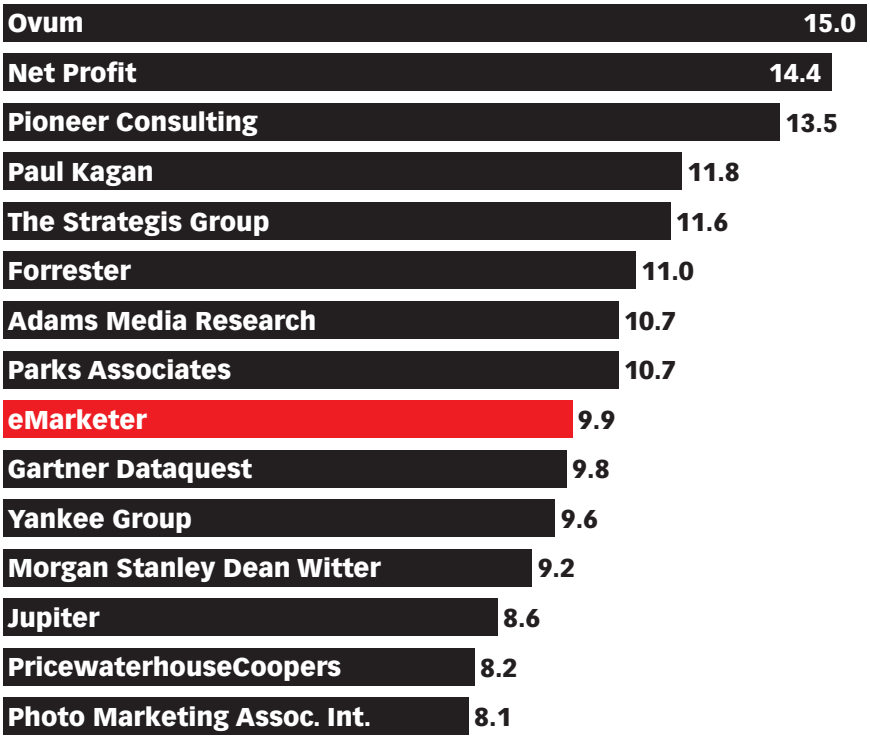
Professor Donna L. Hoffman, Co-Director, eLab, Vanderbilt University

What Makes eMarketer Unique?

eMarketer's approach to market research is founded on a simple philosophy of aggregating data from as many different sources as possible. Why? Because there is no such thing as a perfect research study, and no single research source can have all the answers. Moreover, history reveals that a careful evaluation and weighting of multiple sources will inevitably yield a more accurate picture than any single source of information could possibly provide.

Unlike most other market research providers, eMarketer does not conduct custom research studies or surveys. Neither a research firm nor a consultancy, eMarketer has no testing technique to defend, no research bias and no client contracts to protect.

Comparative Estimates: US Broadband Households, 2001



Source: eMarketer, 2001

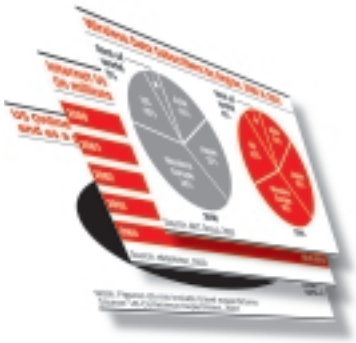
The eMarketer Methodology

Accessing information from the internet as well as a library of electronically-filed research reports, surveys and studies, the eMarketer research team first compiles publicly available e-business data from hundreds of research organizations, consultancies, government and non-profit agencies worldwide. This information is filtered and organized and then presented in the form of easy-to-read tables, charts and graphs. Finally, eMarketer analysts, each specializing in a different area, evaluate the data and provide concise analysis around it to help make sense of the often conflicting numbers and trends.

There are three general types of charts* featured in eMarketer reports and the eStat Database:

- Data compiled from a single, third-party research source
- Source comparison charts, which present various data points compiled from multiple research sources (so readers can easily compare the numbers)
- eMarketer's own estimates and projections

*Examples of each are provided starting on page 8.



"People are drowning in data…they just don't know the important points of information they should be focusing on."
Tim Meadows, VP, Nielsen//NetRatings

What Benefits Do eMarketer Reports Provide?

There are many benefits associated with eMarketer's aggregation approach to research. The evaluation and presentation of multiple sources mean that:

- The information is more objective than that provided by any single research source. eMarketer has no bias towards any particular internet technology, e-business trend or market segment.
- The information is more comprehensive: Each set of findings reflects the collected wisdom of the leading research firms, consultancies and industry analysts.
- The information is all in one place, making it easy to locate, evaluate and compare. eMarketer reports assemble all the different data points and accompanying expert opinions into one easy-to-follow reference document.
- The information is neatly organized and clearly presented to save people time and help them make better, faster and more informed business decisions.
- eMarketer analysts provide analytical perspective and context, so readers can better understand how the internet and e-business fit into the business world at large.

"When I need the latest trends and stats on e-business, I turn to eMarketer. eMarketer cuts through the hype and turns an over- abundance of data into concise information that is sound and dependable." *Mark Selleck, Business Unit Executive, DISU e-business Solutions, IBM*

How Do eMarketer Reports Compare with Those from Primary Research Firms?

eMarketer provides a fundamentally different market offering versus traditional researchers.

First and foremost, eMarketer reports feature aggregated data and different points of view from multiple research sources. This provides readers with a bird's-eye view into how the different research firms compare in their estimates, projections and analysis of internet trends. Market reports from traditional research firms, on the other hand, provide only their own research results, based on their own methodology and testing techniques.

eMarketer reports also serve as a convenient roadmap to other research sources for those wanting more drill-down or "how-to" information on a given topic of interest. For example, readers of eMarketer's eCommerce B2C Report will learn that Cyber Dialogue and Gartner Group have excellent data and analysis about Customer Relationship Management.

"There is no real number. Everyone's number is an estimate."
Bill Bass, former analyst at Forrester Research

Additional Advantages of eMarketer Reports

- eMarketer supplements its report content with a comprehensive database,* which allows customers to search for and instantly find specific pieces of information from any research source worldwide; this database has over 10,000 charts and more are added daily.
- eMarketer numbers give readers confidence because they are based on a sophisticated assessment of all the market research data covering a particular area.
- eMarketer reports sell for $795 (or less), while most research firms price their reports in the range of $2,000-$5,000 (if they allow stand-alone purchases at all).

*NOTE: The eStat Database can be accessed at www.emarketer.com.

"I rely on eMarketer reports to get an unbiased understanding of global e-business issues, statistics and trends."
Bruce Rosenberg, Senior Vice President eBusiness, Hilton Hotels Corporation

For all of these reasons, eMarketer has become a voice of authority on statistics and trends covering every aspect of e-business. eMarketer is regularly quoted in thousands of online and offline business, news and trade media outlets, from CNN and NBC to the *Wall Street Journal, Forbes, Fortune,* CBS Marketwatch, *Information Week* and *Business 2.0*.

"I am working my way through your report. It is wonderful to have so much quality information at hand. And it is terrific to be able to compare the various data from individual sources. You've done a fine job." *Andrea K. Wieder, Newsweek Magazine*

Forecasting Methodology

How Does eMarketer Develop Its Market Estimates and Projections?

Before reviewing the methodology behind eMarketer's numbers, which we refer to as "core metrics," it is important to realize why market projections offered by the numerous research firms differ so widely. The differences are attributable to three general factors:

1. Researchers use different definitions (so they are not, in fact, measuring the same thing).
2. Researchers use different methodologies (which inevitably yield different results).
3. Researchers have different inherent biases; there is also a great deal of interpretation, interpolation and even pure guesswork involved on the part of those making estimates, particularly as regards future activity.

"We all have our secret sauce of ways to come up with the important numbers." *Jack Staff, Chief Economist, Gartner Group*

"It's a crystal ball business, but no one has the crystal ball."
Julio Gomez, Gomez Advisors

eMarketer's 4-Step Forecasting Process

eMarketer's methodology for developing its core estimates and projections is a continuously improved process designed to:

a) leverage the best market research information available at the time,

b) find the "best fit" with that information (this involves a knowledge and understanding of the data behind the data), and

c) in doing the above, make sense of the disparate numbers.

Specifically, eMarketer's four-step forecasting process consists of aggregating, normalizing, weighting and estimating based on the available data.

Step 1: Aggregate

The first step is to aggregate data from as many reputable sources as possible. For example, eMarketer typically aggregates as many as 20 different estimates for the size of the online advertising market, each pulled from a different research firm, industry association or investment-banking firm.

Step 2: Normalize

Since merely lumping together raw numbers from various research firms inevitably results in apples-to-oranges comparisons, eMarketer seeks to "normalize" the data by first understanding and then controlling for different definitions used by the research firms. For example, while the Boston Consulting Group has typically included financial services in its estimates for e-commerce B2C, most other research firms measuring this market have not. And while most research firms include travel in their B2C estimates, the US Commerce Department, now considered the most reliable benchmark, does not.

Step 3: Weight

Not all research firms are created equal (nor are individual research studies conducted by any given research firm). eMarketer analysts carefully weight the results of different research firms based on a number of factors:

- Overall reputation and credibility of the research source.
- Historical accuracy of the research source, based on a comparison between projected and actual results (utilizing eMarketer's eStat Database).
- The sophistication and sample size of the study or survey; for example, many surveys are the result of qualitative interviews with a select group of as few as 20 people.

In addition, eMarketer looks at the broader economic, cultural and technological trends impacting the market or sector being measured. For instance, eMarketer's most recent estimates for online advertising spending this year (2001) were based not only on numbers provided from internet research firms, but also on the downward trends seen in the US economy and the media marketplace in particular. The majority of online ad projections from other research firms were not able to take these economic conditions into account since most of their studies were conducted prior to the market downturn.

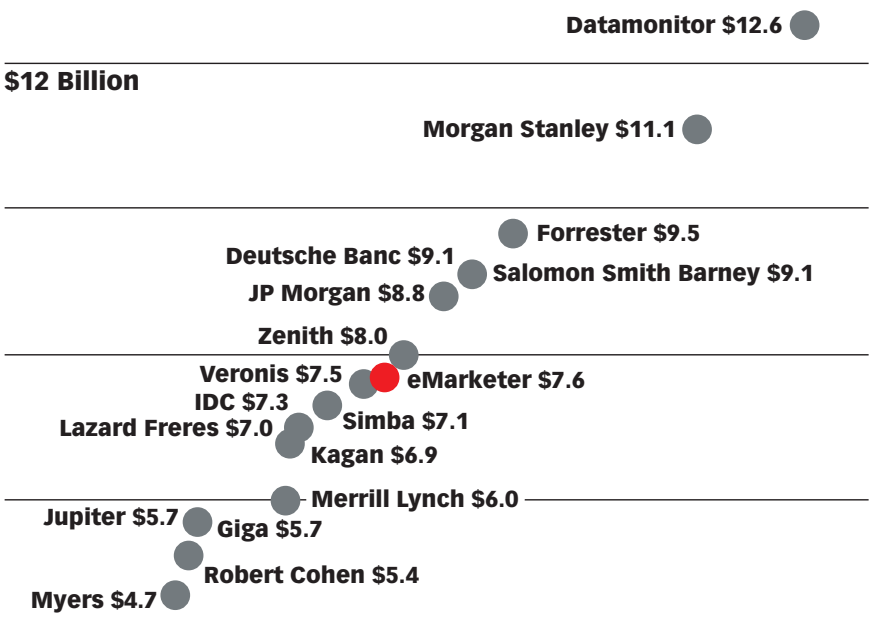
Step 4: Estimate

Having factored the above information into an overall statistical model, eMarketer analysts construct market projections based on the "best fit" with the available data. This process may involve several iterations until the best fit is found – not only with the immediate data being measured, but also with other data that is related to it.

For instance, eMarketer has developed a demand-side model for online shopping. It tracks aggregated data on total e-commerce spending, number of online buyers and average spending per online buyer. Of course, each of these three metrics is related because total e-commerce spending divided by the number of buyers equals the average spending per buyer. eMarketer has compiled aggregated data from multiple sources for all three of these interrelated variables.

The estimating process is a continuous and self-improving feedback loop. With each new data point, eMarketer analysts compare the new information with the existing body of evidence and then reassess their statistical models to reflect the totality of data available.

Comparative Estmates: Online Advertising Revenues in the US, 2000 (in billions)



Source: eMarketer, various, as noted, 2001

"Benchmarking" and Future Projections

Until recently, anyone trying to determine which researcher was most accurate in predicting the future of any particular aspect of the internet did not have a definitive source with which to do this. For instance, over 10 firms predicted e-commerce revenues for the fourth quarter 1998 online holiday shopping season, and yet no single source could be identified after the fact as having the "correct" number. In the fourth quarter of 1999, however, the US Commerce Department finally began measuring e-commerce B2C activity so business people could have a "benchmark" with which they could compare and evaluate projections.

eMarketer has adapted its methodology to recognize that certain government and other respected, impartial sources are beginning to provide reliable numbers that can be consistently tracked over time. Most of these established sources, however, only measure past results; typically they do not make future-based predictions.

Today, eMarketer develops its "core metrics" by first identifying the most reputable source for a given sector being measured and then adopting that organization's figures as benchmarks for the historical/current period. For instance, eMarketers' US internet user figures are based on the most recent data from the (August 2000) Department of Commerce survey. Using this data as the benchmark for 2000, eMarketer makes projections for subsequent years based on the following factors:

- A comparative analysis of user growth rates compiled from other research firms.
- Additional benchmark data from internet rating firms, e.g., Nielsen//NetRatings and Jupiter Media Metrix, which report on internet user activity on a weekly basis.
- An analysis of broader economic, cultural and technological trends in the US.

Similarly, US e-commerce revenues are "benchmarked" using historical data from the US Commerce Department and worldwide internet penetration rates will be formulated using data from the ITU.

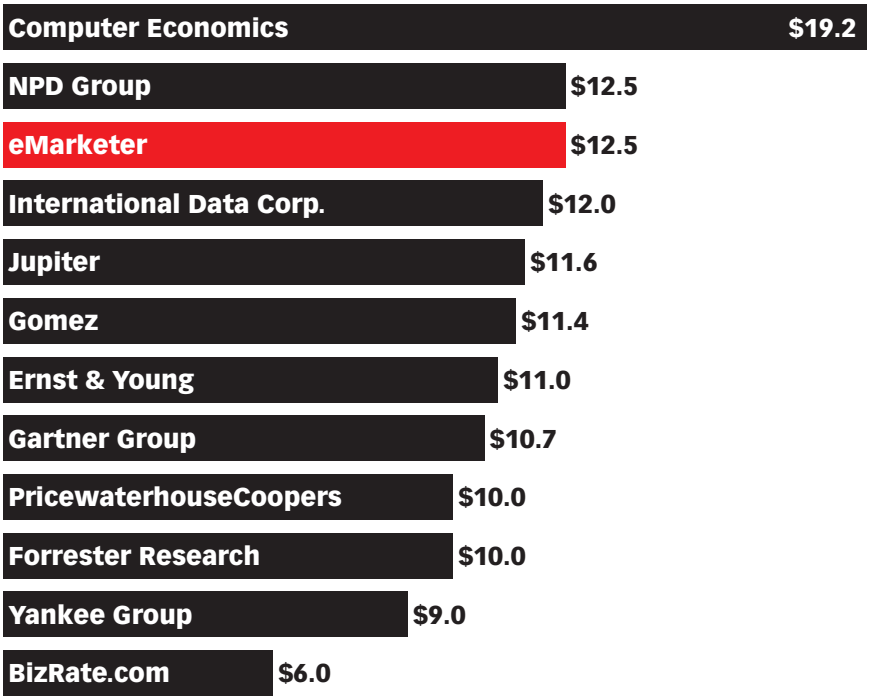
Addendum: Examples of the eMarketer Methodology

The following examples are provided in order to illustrate how eMarketer evaluates and analyzes market research data in preparation for formulating its own estimates and projections.

Example #1: Online Holiday Spending Projections

The following chart shows projections for the year 2000 online holiday shopping season as provided by numerous research firms. However, since the researchers use different measurement periods to define the "holiday shopping" period, with some counting the five weeks before Christmas, others November-December and still others October-December or other periods, the projections are not truly comparable (apples-to-oranges). Note that these projections were made at various points before and during the 2000 holiday shopping season.

Comparative Estimates: US Revenue Projections for 4Q 2000 Holiday Shopping Season, 2000 (in billions)

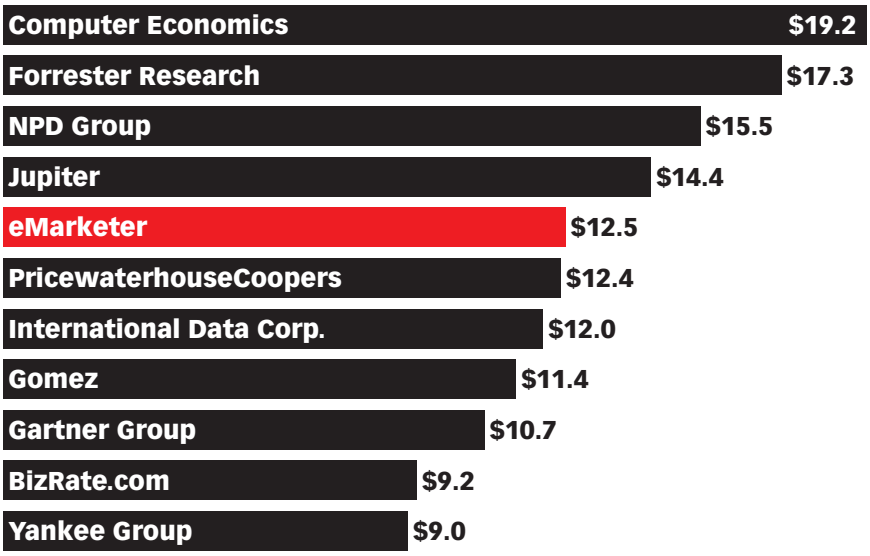


Source: eMarketer, 2000; various, as noted, 2000

eMarketer was able to normalize this data, at least in terms of measurement period, by using actualized sales data from measurement firm PC Data (they provided weekly sales estimates for the holiday period based on surveys of online consumers). In January 2001, eMarketer normalized the comparative source data to the 12-week period of October-December. The following chart shows adjusted numbers for each of the researchers based on extrapolating their figures to the full 12-week period.

In March 2001, the US Commerce Department (DOC) finally announced its estimate for the 2000 holiday shopping season. And while its figure was for the entire 12-week period, the DOC did not include travel (while most other researchers did). The DOC's estimate was $8.9 billion – not including travel. Note that with the addition of travel, estimated by eMarketer at $3.5 billion in 4Q, the DOC's total e-commerce figure would have been $12.4 billion, very close to eMarketer's original projection made in October 2000.

Comparative Estimates: Adjusted* US Revenue Projections for 4Q 2000 Holiday Shopping Season, 2000 (in billions)



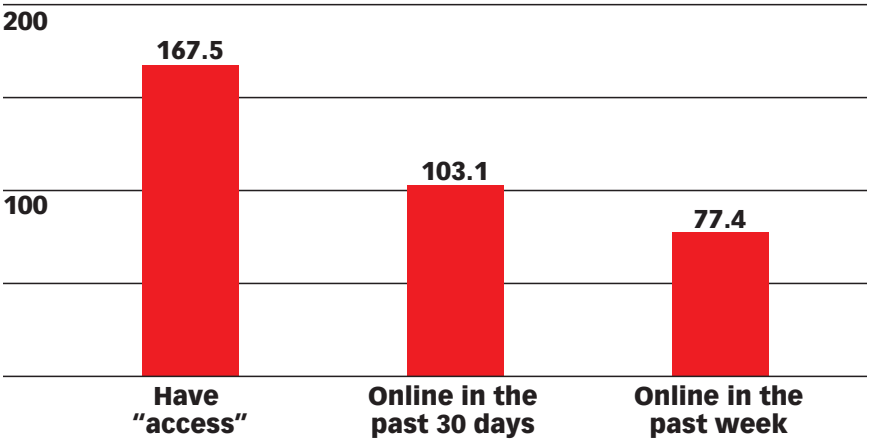
*Note: *Adjusted to 12-week time period of Oct-Dec*
Source: eMarketer, 2000; various, as noted, 2000

Example #2: Internet Users

Research firms also disagree widely on the number of internet users in the United States. The range, in fact, is from 77 million to 152 million. Much of this variance stems from their different definitions for what constitutes an internet user. Some researchers identify an internet user as someone who has ever been online, while others use more rigid definitions such as usage at least once in the past 90 days, 60 days or 30 days. Some even count as internet users those who simply have "access," whether or not they actually get online.

Measurement firm Nielsen//NetRatings provides clear evidence of how different definitions yield vastly different results. As the definition gets tighter, from merely "having access" to monthly and weekly usage, the numbers drop off precipitously.

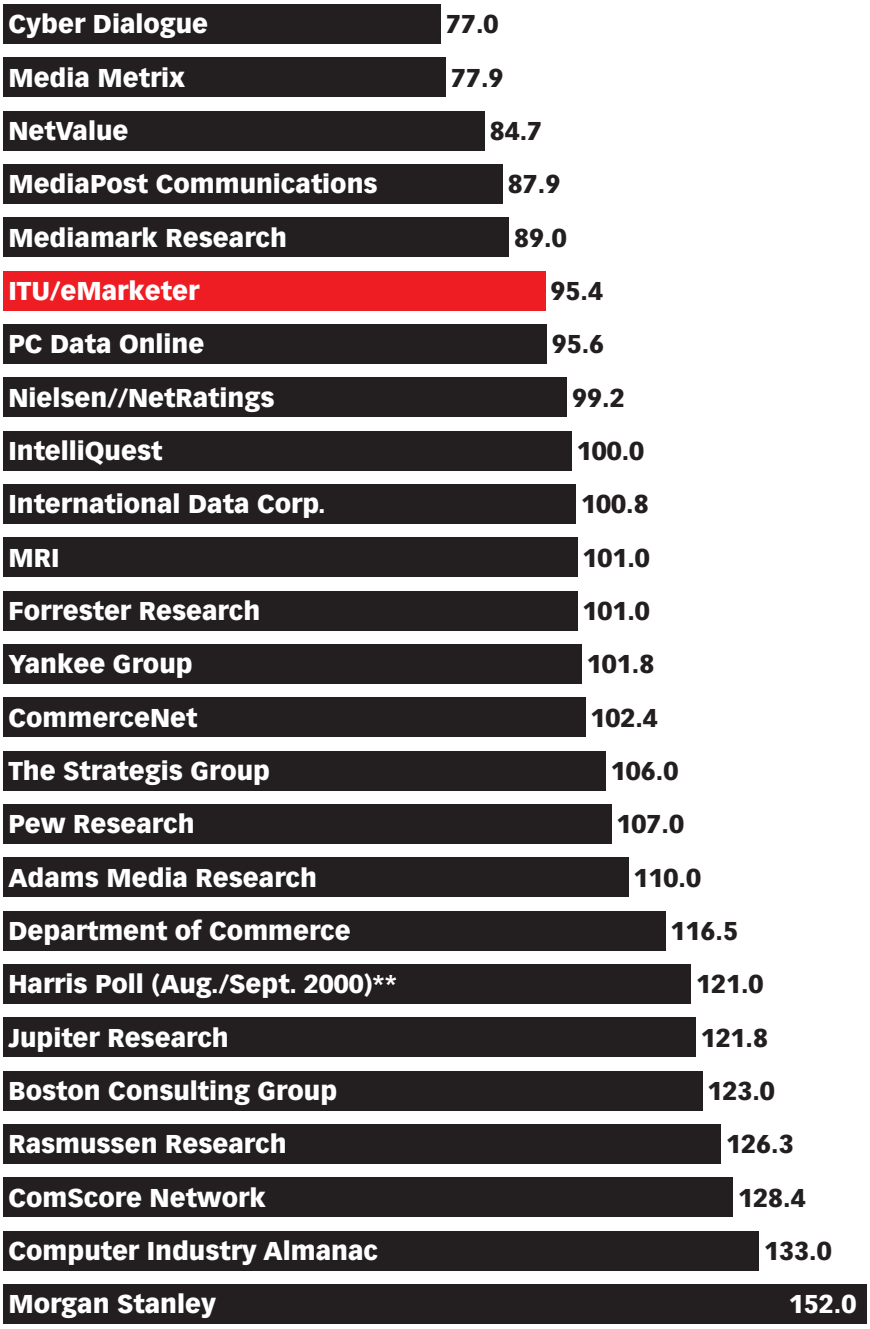
US Internet Users with Internet "Access" and Monthly and Weekly Usage, June 2001 (in millions)



Source: Nielsen//NetRatings, June 2001

The chart below highlights the wide range of estimates for internet users in the US. Much of the variance is attributable to differences in usage definitions.

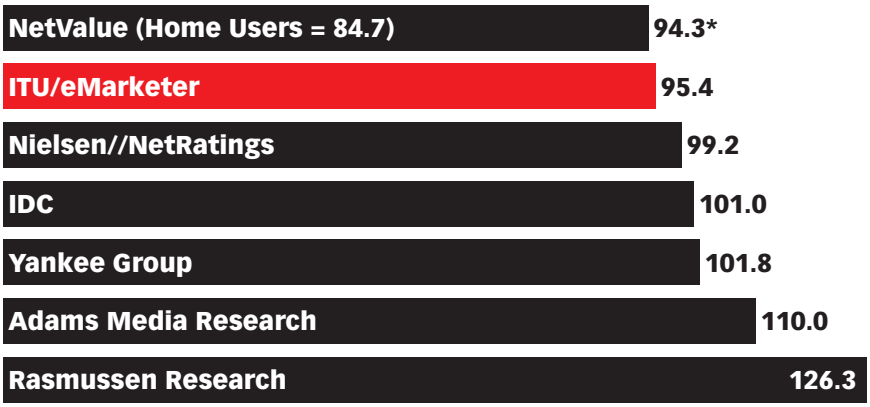
Number of People Online in the US*, 2000 (in millions)



*Note: *Wide range of numbers due to difference in "usage" definitions; **Harris Poll reports 59% penetration of adults in 2000; with base of adults at 205 million, that equals 121 million*
Source: eMarketer, 2001; various, as noted, 2001

However, when eMarketer controls for usage definitions, e.g., past 30 days, the numbers come much closer together.

Comparative Estimates: Americans (of all ages) Who Have Accessed the Internet in Past 30 Days ("Level 3" internet users), 2000 (in millions)



*Note: *eMarketer interpolation based on Nielsen//NetRatings data*
Source: eMarketer, 2001; various, as noted

Example #3: Demand-Side Model

eMarketer has constructed a demand-side model for consumer online buying. It relates total (active) internet users to those shopping and buying online (as well as to average and total dollar purchases). The model is built (and continually improved upon) based on a careful aggregation, weighting and analysis of data from dozens of research and government sources. Each research source provides varying degrees of information on the following interrelated metrics:

- millions in the US population (from the most recent US Census figures)
- millions online in the US
- millions of online "shoppers"
- millions of online "buyers"
- percentage of internet users who shop online
- percentage of internet users who buy online
- percentage of all Americans who shop and buy online

eMarketer analyzes this information, accounting for differences in definitions and methodologies, to construct its model for internet purchase behavior. Note that researchers even have different definitions for online "shoppers" and "buyers." (eMarketer defines an online buyer as someone who has purchased at least one item online in the past year.) A sample grid of eMarketer's online buying model is provided below.

US Consumer Online Buying Grid, 2000-2005 (in millions)

Numbers in millions	2000	2001	2002	2003	2004	2005
Internet users (age 14+)	105.3	117.8	128.2	140.1	152.5	169.0
I. Online "Shoppers" (14+)						
Millions	76.9	90.7	101.3	113.5	125.1	143.7
(% of Total internet users)	73%	77%	79%	81%	82%	85%
II. Online "Buyers" (14+)						
Millions	64.1	79.3	91.1	104.4	116.6	130.0
(% of Total internet users)	60.9%	67.4%	71.1%	74.5%	76.5%	76.9%

Source: eMarketer, 2001

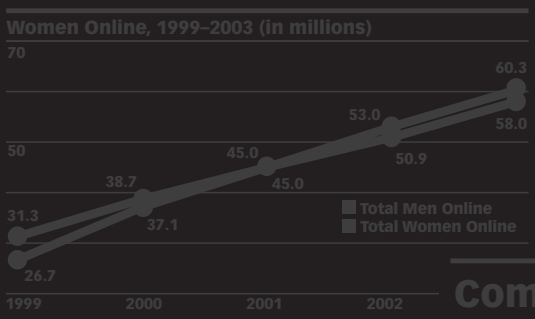
eMarketer Editorial Calendar 2001

Title	Release date
ePrivacy & Security	January
eHealth	March
eDemographics	March
eCommerce:B2C	March
eWireless	March
eBrazil	April
eEurope	April
The Business of Broadband	April
eTravel	April
CRM	April
eJapan	May
Marketing Online to Kids and Teens	May
eCommerce: Snapshot Report for Small Businesses	May
eMail Marketing	May
ePoland	June
eCanada	June
eCommerce:B2B	July
eLatin America	July
eAsia	July
eGlobal	August
North American Wireless	August
Online Advertising	August
US eBanking	September
eCommerce: B2C	September
Electronic Payments	September
eMarketing	October
Europe Online	October
Online Holiday Shopping	November
IT Spending: Overview	December
IT Spending: Telecommunications Market	December
IT Spending: PC Market	December

eMarketer Editorial Calendar 2002*

Title	Release date
eGlobal	January
North America Online	January
Worldwide Travel Market	January
Online Trading Exchanges	February
Interactive Television	February
Online Advertising	March
B2C eCommerce: North America	March
B2B eCommerce: North America	April
Europe Online	April
eCommerce: B2B & B2C Europe	May
Online Investing & Asset Management	May
eBusiness Selling	June
Broadband & Dial-Up Access	July
Online Marketing	July
Asia Pacific Online	August
eCommerce: B2B & B2C Asia Pacific	August
IT Spending: Overview	August
IT Spending: Telecommunications Market	August
IT Spending: PC Market	August
Wireless Access	September
eMail Marketing	September
Latin America Online	October
Computer Hardware & Software Online	October
Online Holiday Shopping	November
Online Access Devices	November
Online Banking & Insurance	November
Online Entertainment	December

* This report schedule will be expanded to include additional reports on timely subjects in 2002.



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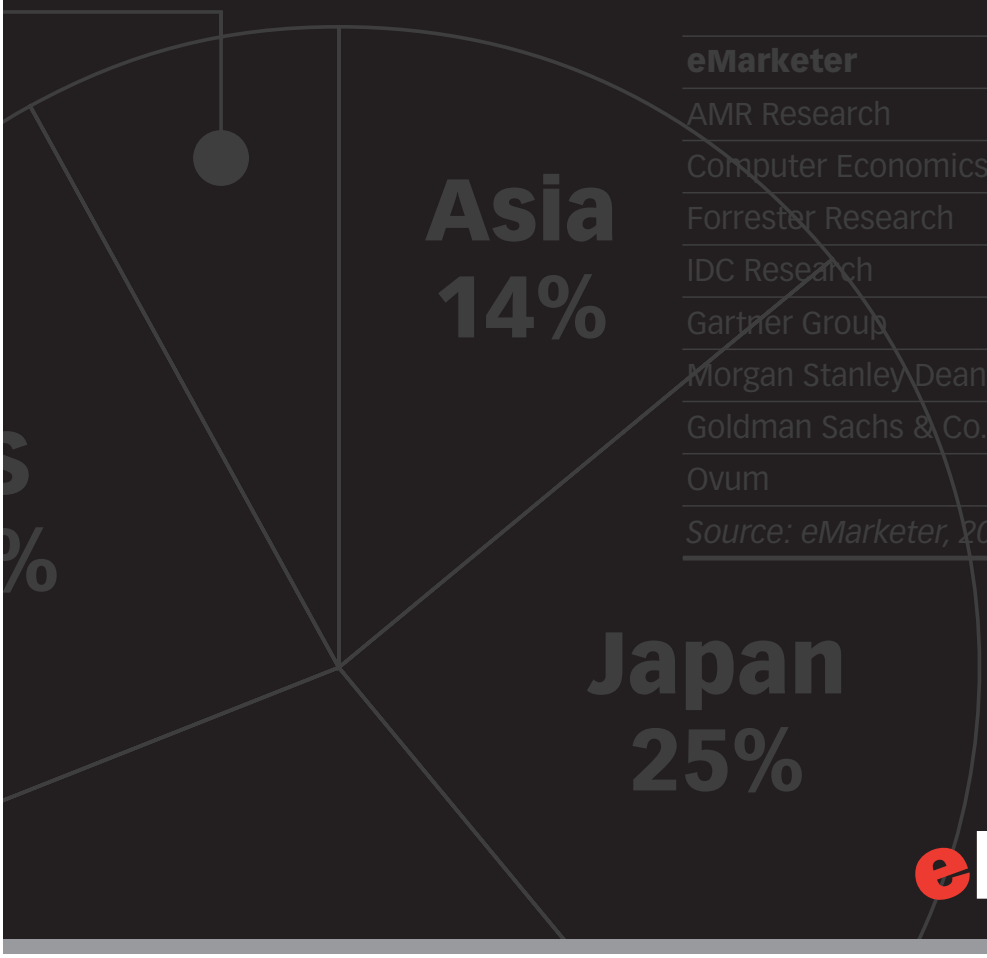

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