

Macromedia's Total Addressable Market Model: Methodology and Data Sources

By relying on the experience, objectivity, and technical expertise of several prominent industry analyst firms, Macromedia is able to develop a balanced, well-reasoned estimate of its Total Addressable Market (TAM).

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Introduction

Macromedia has been publishing revenue sizing estimates and forecasts for its markets for some time. Unfortunately, there is no one single source of information that one can turn to when estimating the overall size and growth prospects for Macromedia's Total Addressable Market (TAM)¹, as the company competes in several diverse markets with a broad product portfolio. However, an estimate of the size and growth rate of Macromedia's markets can be achieved by combining third party industry research with Macromedia's own proprietary research. This white paper outlines both the methodology and the data sources used to carry out this approach.

To develop the models for most of its product segments, Macromedia's Market Research team incorporates revenue estimates and forecasts developed by several prominent industry analyst firms that cover the software industry, including: International Data Corporation (IDC), Gartner-Dataquest, Jupiter Research, and ZapThink. It's a logical place to start, as some of these firms have been covering the software industry for decades. By relying on the experience, objectivity, and technical expertise of these independent analysts, Macromedia can ensure that its own models are balanced and well-documented.

Although some of these analyst firms strive to cover the entire software industry, oftentimes there are gaps in their research coverage. For those cases where the industry analysts cover a particular product segment, but do not publish a forecast, Macromedia Market Research collaborates with the most appropriate analyst firms to develop those specific estimates and forecasts. And in those few cases where Macromedia's product segments lack any industry analyst coverage whatsoever, Macromedia has developed

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¹ Macromedia defines the Total Addressable Market (TAM) as the sum of the actual revenue captured by all of the vendors competing in the specific markets that Macromedia serves. Sometimes referred to as the "Total Penetrated Market" or the "Total Served Market," the Total Addressable Market should not be confused with the Total Potential Market (TPM), also known as the "Total Market" or the "Potential Market", which is defined as those in the total population that may have an interest in buying a given set of products.

product level revenue-based models using point of sale (POS) data, financial analyst estimates, and other sources. Thus, by combining both third party and Macromedia-proprietary models, Macromedia is able to develop a complete, well-reasoned estimate of its Total Addressable Market (TAM).

Below, we will provide (1) a brief overview of the taxonomy Macromedia uses to classify the markets for its products, and (2) an overview of the data sources and forecast methodology used to develop forecasts for the various product segments.

The Macromedia Total Addressable Market Taxonomy

Macromedia categorizes its Total Addressable Market into three main "markets": Designer/Developer, Business, and Consumer (see **Table 1** below).

Table 1: The Macromedia Total Addressable Market Taxonomy

Market	Product Segment	Product Sub-Segment
Designer/Developer	Graphics & Multimedia	Pro Digital Imaging Tools Pro Draw and Illustration Tools Help Authoring Tools Multimedia Authoring Tools eLearning Authoring Tools
	RIA + Servers	Value Application Servers Rich Internet Application (RIA) Servers RIA Development Tools RIA Technology Solutions
	Web Development	Pro Visual HTML Editors Pro Hand Coding Editors Flash Authoring Tools Consumer Web Authoring Tools Other Web Development Software
Business	eLearning	eLearning Infrastructure Web Site Maintenance ePaper Tools
	ePublishing	Demonstration Software
	Rich Media	Flash Advertising Technology & Services Streaming Video Advertising Technology & Services
	Web Conferencing	Web Conferencing
Consumer	Mobile Middleware	

These three markets are grouped into eight different "product segments" that are identifiable, measurable, and tracked by industry analyst firms. Further, these product segments can be further subdivided to several distinct and mutually exclusive "sub-

segments." The revenues for a particular product are allocated to only one product sub-segment, and are never "spread across" different sub-segments.

It should be noted that because Macromedia has substantial revenue market share in some of these product sub-segments (Pro Visual HTML Editors, Flash Authoring), Macromedia does not publish the sizing estimates and forecasts at the more granular individual sub-segment level, as doing so would give its competition too much detailed information about the actual revenues of each its market-leading products. Further, many of the third party sizing estimates on which Macromedia bases its model on do not break out product level revenues into their corresponding sub-segments (e.g., IDC's Worldwide Web-Site Design and Development Tools forecast²). Instead, these analyst firms publish all-inclusive company level revenues at the product segment level.

Data Sources and Forecast Methodology Used

As mentioned above, Macromedia bases most of its TAM model on the sizing estimates and forecasts published by independent third party industry analyst firms. For example, for the Web Development product segment, Macromedia uses the numbers in IDC's Worldwide Web-Site Design and Development Tools market model in their entirety. This IDC model contains revenue estimates and forecasts for Pro Visual HTML Editors, Pro Hand Coding Editors and other Web Development Software. According to IDC, the worldwide market for products such as these will grow from \$793 Million in 2003 to \$1.1 Billion by 2008, a 7% compound annual growth rate (CAGR).³

Before an analyst firm develops a forecast, it typically develops what is called a "revenue market model" consisting of the calendar year revenues captured by all the vendors in a particular product segment.⁴ An industry analyst firm uses a variety of data sources when building a revenue market model, including: (1) reported financial information (including revenue data for public companies), (2) surveys of the major vendors to assess revenue and pricing for their products, (3) product briefings, press releases, and other public information, and (4) survey data from demand-side research (interviews with users of particular software applications). However, it is usually only the larger analyst firms that have the resources to field both vendor and consumer surveys.

The analyst firm then uses the information at its disposal to build revenue models for each product segment. Public company revenues are tied to the revenue totals reported to the SEC (or the equivalent agency for international firms), and estimates for private

² See: Rikki Kirzner, Worldwide Web-Site Design and Development Tools, 2004-2008 Forecast, International Data Corporation (March 2004), #30993.

³ *ibid.*, p 5. It should be noted that the current forecast for Web-Site Design and Development Tools was significantly raised, with the revenue prediction for 2007 representing an increase of approximately 9% over IDC's July 2003 forecast for the period.

⁴ The methodology used by the Framingham, MA-based International Data Corporation (IDC) to size and forecast revenues for software products is one of the best in the industry, and serves as the basis for the subsequent discussion. For a complete description of IDC's Software Market Forecast and Analysis Methodology, see: "Appendix" in Richard V. Heiman and Dennis Byron, IDC's Software Taxonomy, 2004, International Data Corporation (February 2004), #30838, pp. 85-91.

companies are based on its vendor surveys, demand-side surveys, and any publicly available information. After (1) making assumptions regarding revenue recognition, non-software license revenues (including maintenance, consulting, training, etc.), and "other" vendors (smaller, privately held software firms); (2) adjusting for different fiscal years and exchange rates, and (3) taking into account any mergers and acquisitions, the analyst firm is left with a robust snapshot of revenues captured by all of the vendors competing in a particular product segment.

Once the revenue base is developed for a particular product segment, and the market model for the product segment is populated with historical revenue data, the analyst firm then develops a forecast for the market. While methodologies vary from firm to firm, most analysts begin by developing certain macroeconomic assumptions about the global and regional economies, as well as assumptions about how these macroeconomic drivers and inhibitors will affect an individual product segment. The analyst also makes assumptions about industry consolidation, the rise of new entrants, the impact of new technologies, and other market dynamics. Then, if such data is available, analyst firms integrate the results of their demand-side research as a leading indicator of purchasing intentions among customers for a particular type of software application. Finally, for the more mature product segments, the analyst firm can use several techniques such as regression analysis and Monte Carlo simulation as a way to calibrate its future growth projections. Given that the assumptions driving such forecasts can change as quickly as the market dynamics for a particular segment, some analyst firms use these statistical techniques to provide "optimistic", "realistic" and "pessimistic" forecast scenarios for each product segment (if this is the case, Macromedia will always use the "realistic" forecast scenario in its market models).

For those few product segments that aren't covered by an analyst firm, Macromedia Market Research uses the same sources of data as well as the same methodology used by the leading analyst firms, as described above.⁵ While Macromedia does not typically have access to vendor survey data, it occasionally has access to multi-client studies where vendors voluntarily contribute information about themselves in return for information about the segment as a whole. Further, Macromedia can include the results of its own demand-side primary research data for a particular product segment (where available) when building its own forecasts.

Unlike most industry analyst firms, however, Macromedia is able to incorporate the results of point of sale (POS) data obtained from market research firms such as NPD. Such POS data allows Macromedia to better calibrate the ratios of one product or vendor to the next when building a base of vendor-level revenue estimates for a given region. Further, Macromedia is able to analyze the historical release cycle published in the POS data to determine when a new version of a competitive product will be released, and therefore model the appropriate "saw tooth" effect in the trendline for a particular

⁵ This section describes the methodology used to size markets that already exist. For emerging markets or markets that don't yet exist, the analyst must use a combination of primary and secondary market research techniques to build plausible sizing estimates and forecast scenarios. For a solid treatment of some of the challenges involved in forecasting "really-new markets", see: Glen L. Urban, John R. Hauser, and Bruce Weinberg. "Pre-market Forecasting Of Really New Products," Sloan School Working Paper (May 1994), # 3689.

product. Macromedia Market Research believes that such data greatly improves the accuracy of its sizing estimates as well as its forecasts.

Conclusion

By leveraging the expertise of the leading industry analyst firms, Macromedia is able to provide its decision makers with market sizes and forecasts that are not only objective and well-reasoned, but models that in most cases can be replicated and updated by those outside the company as new data becomes available. In those few cases where no industry analyst coverage is obtainable, Macromedia has developed sizing estimates and forecasts using methodologies similar to those used by independent analysts while incorporating the valuable market intelligence contained in the point of sale data. As a result, Macromedia believes that its Total Addressable Market model is able to provide decision makers with the information they need to help assess the overall size and growth prospects for the particular markets in which the company competes.

Bibliography

Below is a partial list of third party reports Macromedia used in building its Total Addressable Market Model. In some instances the entire market sizing data from the analyst firm was used (e.g., Web Development); in other instances only a portion of the data was used (e.g., eLearning).

- Michael Brennan. *U.S. Corporate and Government eLearning Forecast, 2002-2007*, International Data Corporation (September 2003), # 30119.
- Michael Brennan. *U.S. Corporate Business Skills Training Forecast and Analysis, 2003-2007*, International Data Corporation (March 2003), # 28985.
- Dennis Byron. *Worldwide Application Deployment 2004-2008 Forecast: Application/Integration Server Software Converging in Name Only in the Near Term*, International Data Corporation (February 2004), # 30785.
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- Stephen D. Drake. *Worldwide Mobile Middleware Forecast, 2003-2007*, International Data Corporation (March 2003), # 29031.
- Nate Elliott, Andrew Peach and Gary Stein. *Online Advertising Through 2008: Paid Search Drives Modest Recovery*, Jupiter Research (August 2003), # ADV03-V02.
- Richard V. Heiman, Dennis Byron and Rikki Kirzner. *Worldwide Application Development and Deployment Forecast Summary, 2003-2007*, International Data Corporation (March 2003), # 29091.
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- Rikki Kirzner. *Worldwide Web-Site Design and Development Tools Forecast Update, 2003-2007*, International Data Corporation (July 2003), # 29859.
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- Robert P. Mahowald and Mark Levitt. *Worldwide Conferencing Applications 2004-2008 Forecast: A First Look at FY03 Performance*, International Data Corporation (April 2004), # 31128.
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- Ronald Schmelzer. *Rich and Smart Clients for Service-Oriented Architectures: User Interactivity Technologies and Trends*, ZapThink (March 2004), # ZTR-WS111.