

Web 2.0 and Rich Internet Applications:

How Today's Marketers Can Anticipate, Understand, and Help Their Companies Profit from the Web's Transformation

WHAT THE EMERGENCE OF WEB 2.0 MEANS FOR MARKETERS

The Internet is changing in profound ways. These diverse changes – often labeled as “Web 2.0” – make the Internet an even more compelling platform both for its users and for marketers. But Web 2.0 also challenges marketers as never before. The bar has been raised on customer expectations, on the size and importance of your Internet marketing investments, and on your ability to accelerate, target, and integrate them. To meet these challenges, you need better ways to measure your web applications and link measurement to action.

As providers of the award-winning Affinium® Suite – the world's leading Enterprise Marketing Management (EMM) solution – Unica specializes in helping companies profit from Web 2.0. Drawing on our experience, this white paper introduces a complete framework for measuring Web 2.0 initiatives – especially the Rich Internet Applications (RIAs) that are increasingly used to deliver them.

WHY WEB 2.0? WHY NOW?

For years, the vast majority of Internet applications were delivered via HTML. While browser inconsistencies lingered, HTML's universality enabled marketers to deliver applications virtually anywhere.

HTML, however, has serious limitations. It forces customers to navigate primitive and limited “page-centric” applications. Processes such as product configuration require multiple pages, increasing complexity and customer attrition. Providing sophisticated interactivity and feedback is difficult, sometimes impossible.

HOW THE NEW WEB USER AND THE EMERGING SOCIAL INTERNET CHALLENGE MARKETERS

These limitations have grown more frustrating as the Internet audience has become more demanding. Today's Internet users won't just “listen.” They actively participate and collaborate. They create their own content – on millions of blogs and MySpace® pages, in YouTube® videos and RSS podcasts, in Wikipedia® entries and product rating sites.

At their vanguard is the “Millennial” generation: consumers who've been online since childhood, and are highly visual, intolerant of delay, and deeply unimpressed with “typical” internet marketing. For them, the Internet is not merely an information source: it is fundamentally social.

WEB 2.0 AND RIA TECHNOLOGIES

New and maturing technologies are making it possible to deliver what this new Internet audience wants. Adobe's Flex™ application framework, including ActionScript 3.0, provides a state-of-the-art Rich Internet Application (RIA) development platform for the near-universal Flash Player. Developers have also flocked to Ajax, an innovative approach to delivering rich applications with JavaScript, XHTML, CSS, DOM, and XMLHttpRequest.

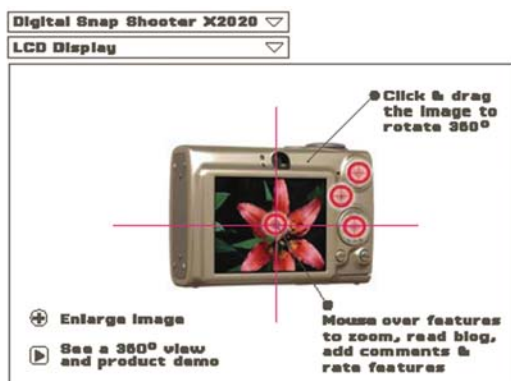


Figure 1: sample RIA allowing users to turn and view a camera from all angles and zoom in on feature details.

Meanwhile, millions of users have created blogs and podcasts delivered by RSS and related technologies. Collaboratively edited “wikis” such as Wikipedia are changing the world. Web services standards – along with accessible application programming interfaces, such as those available for Google™ Maps and Flickr™ – have unleashed new creativity, and sometimes even new business models.

FOR MARKETERS, WEB ANALYTICS ARE CENTRAL TO DELIVERING ON WEB 2.0’S DRAMATIC NEW OPPORTUNITIES

These technological advances open new vistas of opportunity. Marketers are already responding with richer, more interactive product demonstrations and configurators... more powerful financial services tools... more sophisticated travel reservations systems... more personalized healthcare applications.

However, RIAs challenge marketers, who must measure and optimize business value. Since RIAs transcend the conventional HTML page, “page views” and “click-throughs” are irrelevant. Traditional metrics don’t capture desktop-style “events” such as scrolling, panning, or behaviors such as “Add a new MySpace friend” or “Expand a blog post to see replies.”

RIAs typically cost more to create, test, deploy, and maintain: more is riding on them. And, as developers liberate themselves from HTML, RIA user interfaces can vary widely – as can their usability. Questions of cost and usability make effective measurement even more urgent.

HOW TO MAKE IT HAPPEN: DEPLOYING A COMPREHENSIVE, INTEGRATED FRAMEWORK FOR RIA MEASUREMENT

The solution is a comprehensive, fully integrated measurement framework that captures the right information and can translate it into knowledge for rapid, effective action.

The first step: determine what to measure. Sophisticated web marketers are already using Key Performance Indicators (KPIs). Now, they must extend KPIs to customer engagement with RIAs, customer behavior within RIAs, and customer behavior across channels and over time.

These metrics should be actionable. The results should drive something... whether it’s your web development plan, next quarter’s marketing, or next year’s products. For instance: is your configurator seeing increased “tire-kicking” related to a specific new product feature, and what does that mean?

Unica recommends organizing three levels of metrics:

- 1: Measuring the RIA... to improve the application itself
- 2: Analyzing customer/market segments... to improve targeting, messaging, and products
- 3: Analyzing individual customers... to strengthen and activate one-on-one relationships

Let’s take a closer look at each...

Level 1: Measuring the Application

Level 1 focuses on maximizing the value of the application itself, based on aggregated traffic or the individual behavior of anonymous users. Level 1 questions may include:

- Which application features are used (and ignored)?
- What paths do customers follow through your application?
- Where do they encounter trouble?
- Are they achieving the goals you set for them?
- Are their priorities different from yours?
- What application improvements are needed?

Your questions translate into specific application events that can be instrumented. Ajax applications are typically instrumented with JavaScript Event Tags; Flash/Flex applications with ActionScript Event Tags. (For “legacy” Flash applications, an alternative is to “listen” to every click event, and use reporting tools to filter out irrelevant data.)

Of course, capturing raw data is only the beginning. You must rapidly analyze and act on it. Unica’s Affinium NetInsight™ for web analytics – part of the Affinium Enterprise Marketing Management software suite – is singularly well-designed to support this. Using it, you can:

- Formulate KPIs describing specific goals such as engagement, depth of interaction, conversion rates, and revenues
- Drill to any level of detail, and roll up to individual features, feature “groups,” or the entire application
- Report on any event, click, keystroke, or other user input
- Enrich event tags with meaningful information describing each event. For example: the price ranges selected by users of an Ajax-based web site when browsing used cars, real estate, or other products

Using Affinium NetInsight’s powerful Path Visualization, it’s easy to:

- Visualize the next steps users take from anywhere in your application, or the previous steps that have taken users to a specific location within the application – as shown in Figure 2
- Collapse/expand application detail, to see the forest and the trees
- Recreate any individual session, event by event

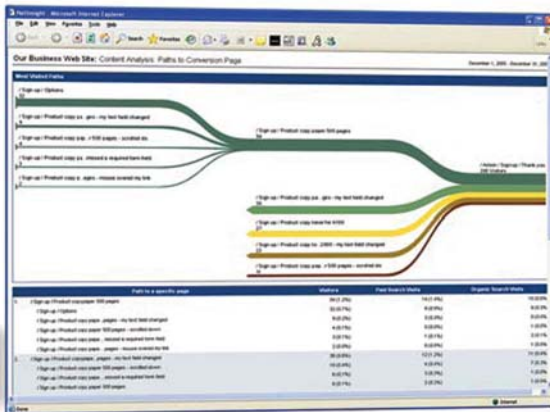


Figure 2: visualize through which paths visitors reach bottlenecks within the RIA – where they give up and drop off

Level 2: Analyzing Customer/Market Segments

In Level 2, you optimize the value of products, services, targeting, and messages.

Here is a classic example: an online car parts store that uses data from an online car configurator to create more attractive sets of car accessory options. Or, envision a bookstore’s Web 2.0 calendar application that lets users create reminders about in-store author appearances. Upon discovering that this feature is especially valued by non-fiction readers, the store might use it as a medium for exclusive non-fiction promotions (see Figure 3).

The store might also integrate application usage information with external demographic data. Unica’s Affinium NetInsight offers powerful tools for holistically analyzing all information relevant to customer and market segments. You can:

- Report on any visitor segment, e.g., those from specific geographies or demographics, or with specific visitation histories
- Report on each segment’s product and message preferences, to design better packages or advertising, or forecast future sales
- Perform A/B analysis of experiments with different colors, messages, or pricing
- Link offline conversions to earlier online activities

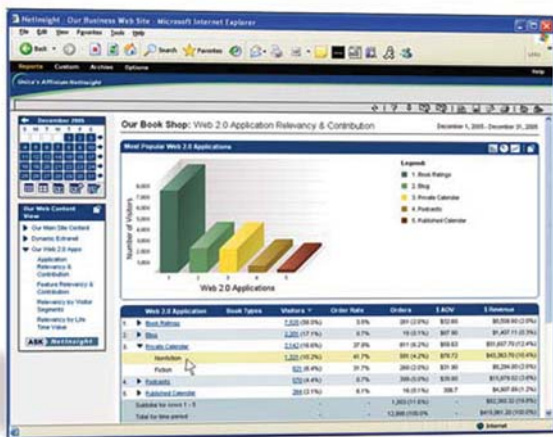


Figure 3: a bookstore reporting the value of RIAs broken down by fiction vs. non-fiction books

Level 3: Analyzing Individual Customers

Finally, in Level 3, you build actionable profiles that activate your relationships with each individual visitor, and maximize the value of every customer.

Using Unica's Affinium, you can record behavior and set action triggers for individual, identifiable visitors. You can capture each user's session history, developing a unique "finger-print" of their interests and preferences – even integrate data from "offline" channels such as call centers or retail.

Suddenly, you can gauge each customer's level of engagement, more accurately predicting their long-term value and where they stand in the buying cycle. Leveraging this "complete view of the customer," you can perform Intelligent Customer Decisioning: automatically sending the right communication or offer at the right time.

PUTTING IT ALL TOGETHER: A CASE STUDY

Let's walk through an example that encompasses all three levels.

To deepen customer engagement, an online electronics retailer constructs a Web 2.0 application that goes far beyond conventional "customer review" features. Built with Ajax, this application enables users to zoom in on a product's individual features and comment on them using "Wiki-like" editing features. The application might also let users rate a feature's relative importance and how well individual products implement it.

Implementation Phase

To generate metrics, the retailer first tags relevant events within the application to track usage. For example, the retailer would likely tag events of users reading reviews, clicking to reply to other users' reviews, zooming in on individual electronics product features to comment on them, and rating features along the way. Descriptive information would also be captured through the event tags, as would be numeric data such as the ratings applied to these product features. For instance, the tags would capture the names of the product features users have chosen to zoom in on for more detail.

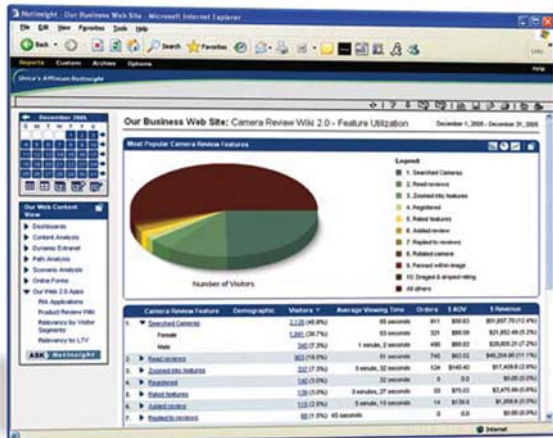


Figure 4: feature and event level report for a Web 2.0 style camera review wiki application with additional demographic details.

Level 1: How the Application Is Being Used

With Affinium NetInsight, the retailer then identifies common "exit points" where users fall away. Affinium NetInsight's advanced "path-to" visualizations illuminate how users arrive at usability "bottlenecks," offering quick insight for improvement. The retailer also measures the time visitors spend with the application, as well as their repeat usage behavior. Furthermore, KPI reporting in Affinium NetInsight reveals the application's ROI by identifying which users are likeliest to make more frequent and more profitable purchases. By reporting the same KPIs at the level of individual user behaviors within the RIA – such as zooming in on a specific product feature – the retailer can project the value (see Figure 4) of further developing the application functions that are used by its most valuable customers.

Level 2: Analytics: Understanding Market Value of Product Features

At Level 2, the retailer drills down into its product feature ratings to understand which features of electronics products interest its customers. By combining this information with A/B price experimentation, the retailer can discover how much value customers place on a given feature. The retailer might even sell this information back to manufacturers.



Figure 5: intelligent follow up through email or any other channel can be automated based on decision trees in Affinium

Level 3: Analytics: Lead Individual Users to Meaningful Action

At Level 3, the retailer closely observes individual customer behavior and acts on what it learns. For example, a customer may have rated LCD displays as extremely important, but disliked a specific camera's LCD. Using Affinium, the retailer can set up automated rules (see Figure 5) to email the customer about new cameras with LCDs that earn high ratings from other users.

Thanks to Affinium, users receive buying advice from peers, whom they're more likely to trust. The retailer can leverage the entire community's social intelligence to make personally relevant offers in real time.

UNICA AFFINIUM: INTEGRATED TOOLS FOR INTEGRATED METRICS AND ACTION

To achieve the full potential of Web 2.0 and RIAs, you must implement and integrate all three levels of measurement. This is virtually impossible to accomplish without the right toolset. Unica's Affinium Enterprise Marketing Management (EMM) software suite is that toolset.

Affinium NetInsight offers deeper, more intuitive insights into site visitors' behavior. Affinium NetInsight's unmatched interactivity, "drill anywhere™," and "trend anything™" capabilities empower marketers to explore KPIs in unlimited detail – answering questions instantly, without involving IT or service providers.

Affinium NetInsight's unique open architecture simplifies capturing data from RIAs and integrating web analytics with other customer data. Moreover, only Affinium can unify web analytics with robust customer analytics, event detection, campaign management, lead management, and marketing resource management.

Unica's Affinium Suite can transform all facets of internet and relationship marketing, as well as marketing operations, including planning, budgeting, project management, execution, and measurement. Customers worldwide rely on Unica's solutions – and in the Web 2.0 era, these solutions offer more value than ever.

ABOUT UNICA

Unica® Corporation (NASDAQ: UNCA) delivers the most comprehensive Enterprise Marketing Management (EMM) suite on the market today. Its Affinium® software suite uniquely enables marketers to analyze and act on customer cross-channel behavior easily and efficiently. Unica's enterprise-level web analytics solution, Affinium NetInsight™, offers the industry's most user-friendly, intuitive graphical reporting and exploration capabilities. When used in conjunction with other EMM modules, Affinium NetInsight allows marketers to integrate online and offline behavior tracking and analysis and improve campaign targeting and customer segmentation across multiple channels to truly optimize marketing effectiveness.

Focused exclusively on the needs of marketers, Unica's Affinium software streamlines the entire marketing process – from planning and budgeting to project management, execution, and measurement. Offered on premise or on demand, Unica's EMM solution delivers web and customer analytics, demand generation, and marketing resource management. Today, more than 500 companies worldwide have adopted Unica's Affinium as their EMM solution.

Founded in 1992, Unica is headquartered in Waltham, Massachusetts, with additional offices in the US, Australia, France, Germany, India, Singapore, Spain, and the UK. For more information, visit www.unica.com.

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