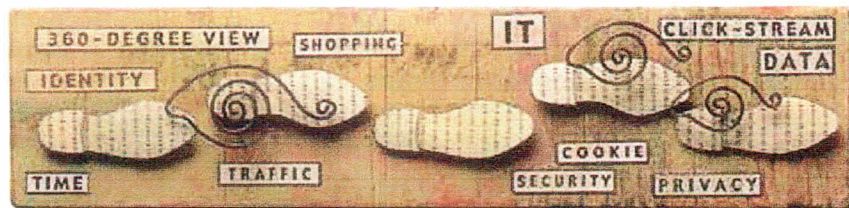


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IT AGENDA 2001

PLUMB YOUR CLICKSTREAM DATA



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By STEVE ULFELDER

Recently, David Cameron needed to put his young daughter on an airplane. He figured he might as well start building her a cache of frequent-flier miles, so before making the reservation, he says, "I went to the airline's Web site and was able to enroll her [in the frequent-flier program] instantly."

Cameron is vice president of database integration services at Wheelhouse Corp. in Burlington, Mass., which designs Internet marketing infrastructures, so he had a professional interest in what would happen next.

After securing the frequent-flier number, he waited an hour to call the airline's reservation system, assuming that would give the online frequent-flier data enough time to sync up with the reservation system. "I thought an hour was generous," Cameron says. "But the reservation system hadn't even heard of her frequent-

flier number." In the end, he says, it took three days for the data sources to be merged.

The story illustrates one of the top challenges facing businesses in 2001: making better use of the customer data captured on a Web site. This "clickstream" data, often described as the footprints visitors leave at a site, has grown wildly - large businesses may gather a terabyte of it every day. But companies' ability to analyze such data hasn't kept pace with their ability to capture it.

Experts say the next frontier of Web data analysis is better integration of clickstream data with other customer information, such as purchase history and even demographic profiles, to form what's often called a "360-degree view" of a site visitor.

This year, you and your company will face other questions related to clickstream data as well. Who should take the lead on data analysis? Is outsourcing such sensitive data a viable option? And how do you gather and use the data your company needs while maintaining a strong privacy policy, which is growing increasingly important to consumers?

Track Your Visitors' Footprints

Clickstream data shows which pages of a site were visited and in what order, as well as how long the visitor remained at each page.

The data, if used properly, can be a gold mine. The problem, say experts, is that few businesses use clickstream data properly: Companies simply rake in all the raw data they can but have a limited ability to understand what all that information can potentially tell them.

Checklist

Combine clickstream data with other information, such as a customer's purchase and service history, to maximize its value.

Consider outsourcing: Let somebody else worry about the sheer quantity of your clickstream data.

Make sure your company's marketing executives fully understand your technology's capabilities and limitations.

So, what data do you need to track?

Perhaps the most common footprints captured are the first ones site visitors leave: When did they enter, and from where did they come? The answer to the latter question, often called the "referral URL," is vital to businesses seeking to figure out where customers come from.

Visitors may have typed in the company Web address manually, but it's more likely

that they clicked on a banner advertisement or some other link. If they entered the site via a banner ad, it's handy to know where the ad ran so you can evaluate the effectiveness of various marketing and advertising strategies.

You'll also need to track the duration of each visitor's stay; how many pages the visitor looked at and in what order; which products were viewed and which, if any, were purchased; and where a user ditched the site.

This latter information is critical to retailers, which are constantly vexed by the phenomenon of the abandoned shopping cart. Reports indicate that as many as three quarters of online shoppers who put items in a cart bail out before completing their purchases.

There are many possible reasons for this. Privacy advocates say many shoppers balk when asked for their credit card numbers. But unwieldy or confusing site design also accounts for many of the abandoned carts.

Businesses that ask consumers to fill out forms face bailouts as well. "We're interested in how far someone gets through our application before they abandon it," says Mark Lawrence, IT director and chief privacy officer at CompuCredit Corp., an Atlanta-based credit card company. "We want to know where they abandoned it and why."

When Hoover's Inc. in Austin, Texas, launched a channel devoted to travel, the online research company was surprised at the new page's worse-than-anticipated performance. When promoting the new channel, "what we thought would work was buttons on the home page," says Craig Lakey, Hoover's vice president of marketing. "We found out they were coming from other areas."

Hoover's used Essentials, an analysis tool from Personify Inc. in San Francisco, to determine that the home-page promotion was being wasted because 80% of the company's traffic entered its site through other pages. Hoover's shifted its travel-channel promotion to other areas of the main site - and more than doubled its travel-page views, Lakey says.

Determine Whose Job It Is

The first critical task in 2001 regarding clickstream data is deciding who should own the process. Some experts believe that marketing, as the primary user of Web-derived customer data, should own the analysis process, but it will likely be your IT department that's charged with collecting that data.

According to a recent report from Jupiter Research Inc. in New York, usage analysis should be performed by those who are most likely to use the information. "While IT resources are certainly necessary," the report says, "the IT group is too far removed from the business goals of usage analysis."

The IT leaders interviewed for this story paint their clickstream data-analysis function as an equal partnership between marketing and IT. The marketing folks set the vision, deciding where the business needs to go and what information must be gathered and understood in order to get there. IT's role is to implement their vision.

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David Cameron, vice president of database integration services, Wheelhouse Corp.

For example, Kurt Schlicher, a systems architect in the Internet group at Dodgeville, Wis.-based retailer Lands' End Inc., says his department has customized

its copy of Insight, a data collection and analysis tool from Fremont, Calif.-based Accrue Software Inc.

"Basically, we have a number of reports the marketing department uses," Schlicher says. "We've modified [Insight] to understand our cookie formats and page-naming convention."

Decide Whether to Outsource

The two biggest difficulties in effectively analyzing clickstream data, analysts say, are having too much information and not enough people to analyze it. It's no secret that the amount of customer data available from businesses' Web sites continues to increase. These days, "the larger sites pull in several gigabytes a day," says Wheelhouse's Cameron. "Maybe terabytes."

Meanwhile, the Jupiter survey found that 53% of Web businesses had less than one full-time employee devoted to data collection and analysis, and 23% had no one assigned to the job.

It should come as no surprise, then, that outsourcing data collection and analysis is gaining popularity. "As sites grow, they're just faced with overwhelming data," says Peter Marino, a Jupiter analyst. "Outsourcing takes that off their plate."

Gathering, never mind analyzing, clickstream data is "Priority 6 or 7 [for overworked IT departments], so it never happens," says Usama Fayyad, CEO of digiMine Inc., a Kirkland, Wash.-based company that uses a service-provider model to deliver data warehousing and analysis.

Of course, when you outsource any data-related function - collection, analysis or even storage - you give a third party access to information. And when this information is customer-related, you're playing with fire.

Marino says he's spoken with several financial services companies that have resisted outsourcing their data collection and analysis for just that reason. "It's a big stumbling block," he says, but it can be overcome through careful selection of partners and rigorous application of standard security and privacy practices.

Create a Full Picture

In 2001, leading organizations will seek to do a better job merging clickstream data with information from other sources to form a richer picture of customers. The clickstream is fine, analysts say, but its use is limited if it stands alone. The wave of the future is an integrated data-snapshot of a customer that includes clickstream data; previous purchases, if any, not only from the Web site but from other channels; the consumer's customer service history; and demographic data.

That 360-degree view of customers and potential customers should be a high priority in the year ahead. Automobile parts retailer JC Whitney Inc. currently uses tools from Portland, Ore.-based WebTrends Corp. to track only high-level customer data such as the make and model of cars, according to Bruno Brunetti, the Chicago-based company's director of Internet development and operations. But JC Whitney is barely using WebTrends' capabilities.

Next year, Brunetti says, "we're going to try to understand customer behavior more to enhance the user experience." That means collecting more granular clickstream data and combining it with information from other sources.

At Hoover's, the challenge is to evolve the present data-analysis function into "more of a [customer relationship management] platform for a fuller view of the customer," Lakey says. Hoover's plans to use Proactive, a Personify profiling application,

to import demographic data on customers and prospects.

Choose Your Privacy Path

Hand-in-glove with the data gathering and analysis problem is the privacy question. This past year, the number of corporate embarrassments caused by inadvertently exposed customer data skyrocketed. It's become such a concern that many businesses have appointed a chief privacy officer to set policy, educate employees and ensure that proposed business deals don't risk privacy breaches.

Arabella Hallawell, a senior analyst at Stamford, Conn.-based Gartner Group Inc., warns that in 2001, "customer information data-sharing is going to be a big problem [for] enterprises," because of the increasing amount of information shared with service providers and because of the "extended relationships in the supply chain."

Experts say you need to make a choice: Do you obey the letter of privacy laws, primarily to limit corporate liability? Or do you "take the high road," as Hallawell puts it, and establish tougher policies than required? Regardless of which path you choose, somebody in the business - usually legal counsel, but sometimes a chief privacy officer or CIO - must stay current on the array of privacy-related laws and regulations that are pouring forth from the federal and state legislatures.

It's worth remembering that taking the high road may actually provide a competitive advantage in some businesses, particularly those that are consumer-oriented. "If customers don't trust you," Hallawell says, "they don't want you to know them better." v

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