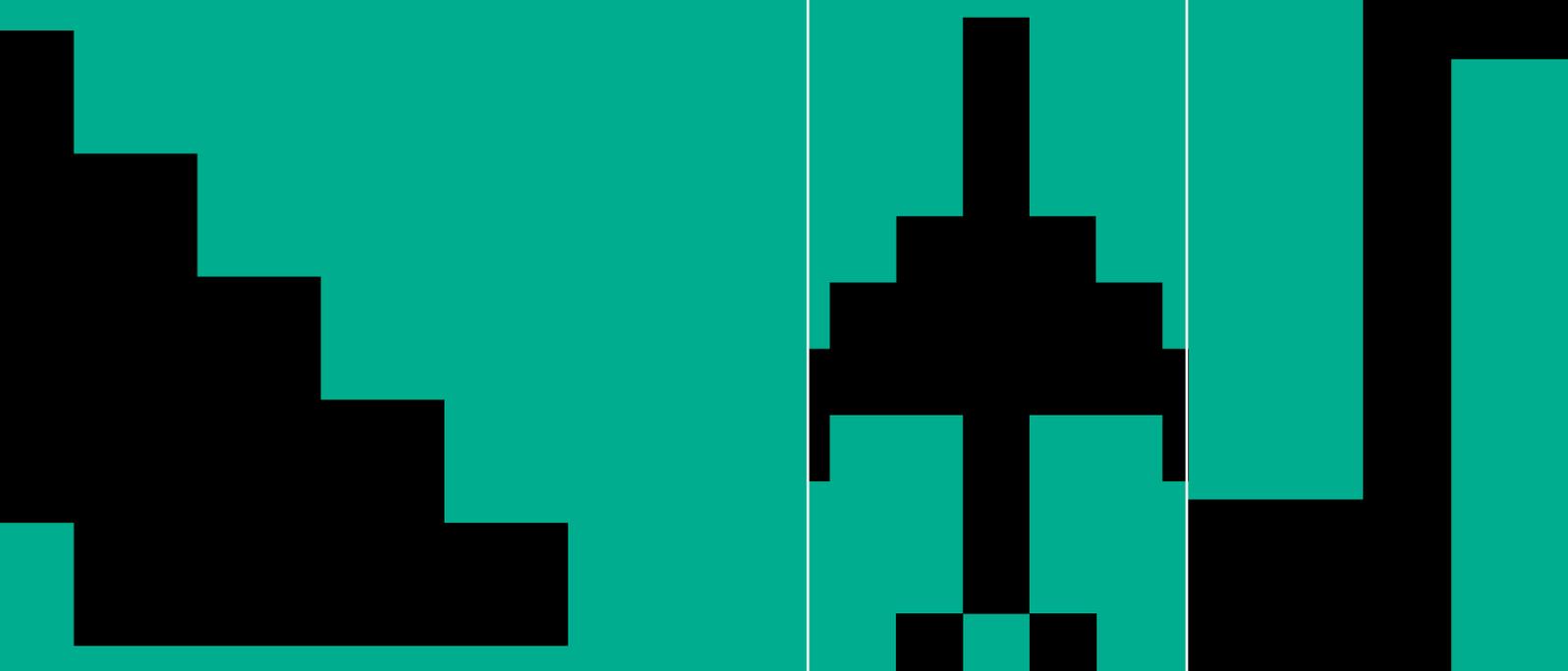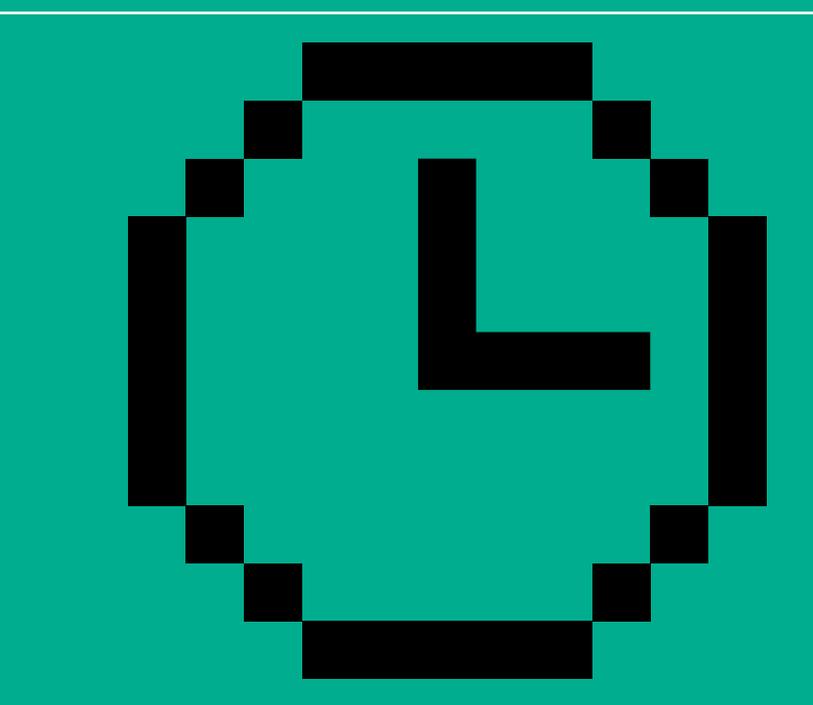# Seize the
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The Seven-Segment

Internet marketing has been a shot in the demographic darkness. Effective e-tailing must target not just users, but usage — a methodology called "occasionalization."
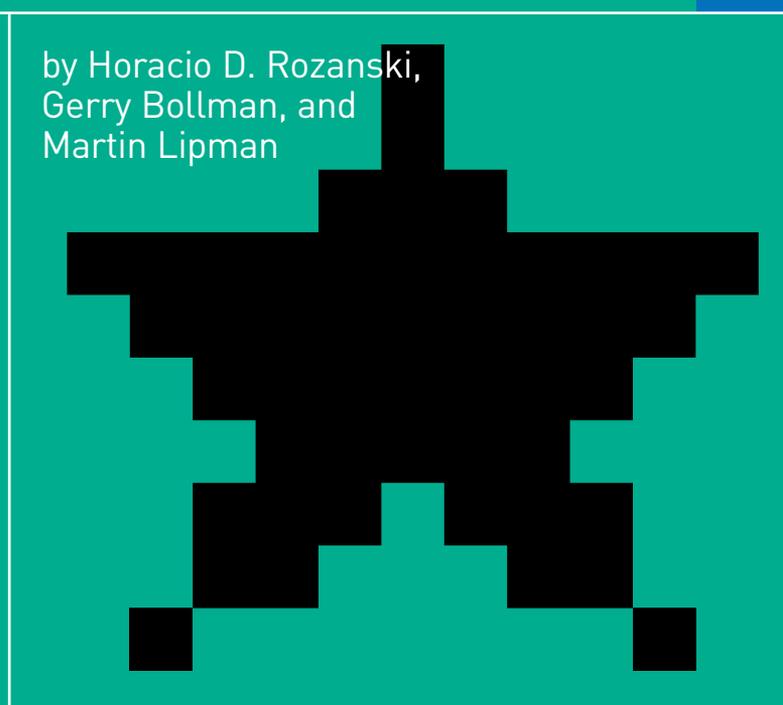
System for Online Marketing
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by Horacio D. Rozanski,
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It's a cardinal rule of consumer marketing, learned in the first year of business school: You must segment your market. The principle has prompted an endless quest by marketers and their ad agencies, retailers, and research firms for new segmentation schemes that promise accurate — and actionable — insights into consumer behavior. Over the years, demographics (age, education, income) have given way to psychographics (attitudes), and even to geopsychodemographics (age, education, income, attitudes, and location) as a segmentation framework. Whatever the approach — the motivational research popular in the 1950s, the VALS system of the 1970s, or the PRIZM methodology that was the rage in the 1980s — segmentation has always been predicated on a simple equation: Who consumers are indicates how to market what they'll buy.

The focus on demographics — the outward and visible signs of inward attitudes — grew more out of marketers' need for analytical criteria than out of any inherent link between a person's demographics and shopping behaviors. Age, gender, and wealth correlate well — *on average, over time* — with underlying attitudes; historical shopping behaviors, such as credit-card usage, are the best indicators of *typical* future behaviors.

Do those predictors hold true for Internet marketing? Since the early days of the Internet, online marketers and retailers have relied on those accepted formulas. They believe that a combination of demographic and attitudinal data, derived from knowledge of the sites users commonly visit, provides all the relevant information needed to create effective messages and aim them at target consumers. But this approach simply applies traditional marketing methods to the e-world, without exploiting the Web's unique strengths. The abysmal performance of targeted banner advertising on Internet portal sites, where click-through rates today average 0.1 to 0.2 percent, underscores the failure of this conventional wisdom.

Wherein lies the flaw? An exclusive study by the Digital Customer Project, an alliance between Booz-Allen & Hamilton and Nielsen//NetRatings Inc., shows that the most effective segmentation scheme for online consumers first groups them by their individual behavior at a point in time, not by demographics or psychographics, or even by aggregate online behavior. We call this form of segmentation "occasionalization," since it is based on what people do on the Internet on different occasions. Unlike traditional online segmentation systems, which rigidly define consumers (e.g., as Web surfers, e-mailers, etc.), occasionalization recognizes that effective targeting does not depend only on who the user is. Rather, it analyzes users' moods and how they are using the Web at particular moments.

Our detailed study of several thousand Internet users uncovered seven discreet usage-based segments — or occasions — each defined by a widely shared, yet distinct, behavioral pattern that revealed how users "consumed" the Internet on these occasions. The study indicates that users' activities and behaviors during different Internet sessions, regardless of the users' demographic and attitudinal characteristics, show propensities specific enough to be predictive, within the context of a well-developed online marketing plan.

Occasion-based segmentation has long been applied in offline marketing, but we believe it should be a primary tool in online marketing — hence the need to give it a name associated with its application. Indeed, how occasion-based segmentation in the offline world works is the reverse of how occasionalization does. Offline, marketers

Exhibit 1: **Characteristics of the Seven Usage Occasions**

Segment	Defining Characteristics				Additional Characteristics		
	Session Length	Time Per Page	Category Concentration	Familiarity	Number of Sites	Pages Per Site	Time Per Site
Quickies	1 min.	15 sec.	90%	90%	1.8	2.2	0.6 min.
Just the Facts	9 min.	30 sec.	47%	88%	10.5	1.7	0.9 min.
Single Mission	10 min.	1.5 min.	85%	11%	2.0	3.3	4.9 min.
Do It Again	14 min.	2 min.	87%	95%	2.1	3.3	6.7 min.
Loitering	33 min.	2 min.	66%	90%	8.5	1.9	3.9 min.
Information Please	37 min.	1 min.	41%	14%	19.7	1.9	1.9 min.
Surfing	70 min.	1 min.	26%	85%	44.6	1.6	1.6 min.

must choose a segment and a way to serve it; online, marketers are free to expand their reach to multiple segments, creating distinct offerings as consumers move from occasion to occasion. The same consumer could get a different offer — or no offer — depending on his or her online activity during a specific occasion.

Thus, effective online marketing planning must reflect how the consumer is using the Internet in a given session. Only then do more traditional factors for targeting consumers come into play. By decoding the type of session in which consumers are engaged — for example, one focused on gathering product information — marketers can fully harness the Web's interactive powers. They will be better able to create messages and offers that will appeal to target consumers when they are most open to responding to those specific messages and offers.

Defining Segmentation for the Web

To develop a consumer segmentation system, we analyzed Nielsen//NetRatings' click-stream data collected between July and December 2000 from 2,466 users. We quickly saw the need to go beyond conventional methods of segmenting audiences. Many types of people use the Internet, but we could not find a predictive demographic typology. Neither could we find actionable predictive patterns when we analyzed individual user data to find groups of people who routinely engaged in one sort of activity over others. In fact, an early attempt to segment groups based on behavior found that almost 60 percent of online users exhibited a similar "average" behavior, meaning they fell into the same broad segment, which we dubbed "Pat Q. Public." However, the large Pat Q. Public category actually masked a set of distinctive behaviors: As

in offline life, any one person would engage in different activities online at different times.

We then analyzed the click-stream data by exploring session characteristics. A session begins when a user logs on to the Internet, and ends when he or she logs off; it includes the entire click-stream generated during that time. A total of 186,797 individual user sessions were included in the data. After examining numerous aspects of online conduct, we found that four variables proved most significant in defining discrete clusters of behavior:

- **Session Length.** The time a user stays online.
- **Time per Page.** The average time a user spends on each page during a session.
- **Category Concentration.** The percentage of time a user spends at sites belonging to the most frequented category. For example, if in a 10-minute session, five minutes were spent at sports sites, three minutes at news sites, and two minutes at entertainment sites, the category concentration would be 50 percent (the category being sports sites).
- **Site Familiarity.** The percentage of total session time a user spends at familiar sites, defined as those previously visited four or more times.

In turn, these four session variables combine to define the seven usage occasions. (See Exhibit 1.) The following list arranges them by session length, the best overall marker of what's happening in a session.
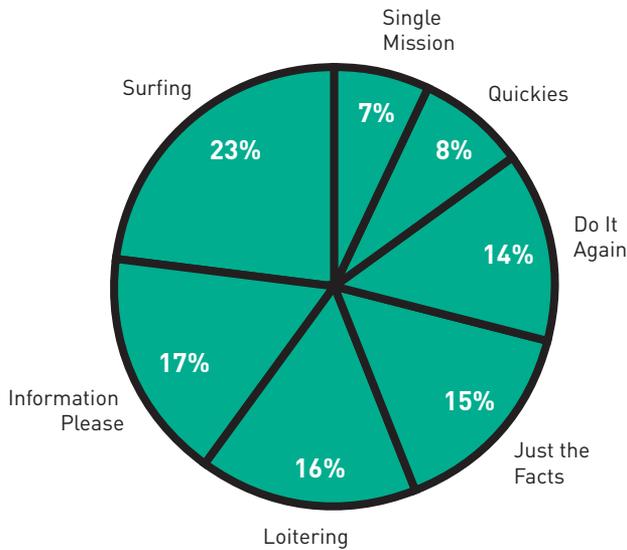
1. Quickies occasions are typically short (one minute) and concentrate on visits to two or fewer familiar sites. Users spend about 15 seconds per page extracting specific bits of information (sports scores, stock quotes) or sending e-mail. Sites requiring a longer time commitment — entertainment, shopping, and communities — are not on the itinerary for this type of session.

2. Just the Facts occasions involve users looking for specific information from known sites. At nine minutes, these occasions are longer than Quickies, but similar in that both involve rapid page views (30 seconds each). In Just the Facts sessions, users find and evaluate bits of information from related sites. For example, a woman seeking a certain type of shoe would move quickly from Web site to Web site, checking for the right style, size, and price, until she found just the right pair. These sessions typically include visits to transaction-oriented or time-consuming sites, such as shopping, travel, and sports sites. Just the Facts occasions are less likely to involve sites best enjoyed at leisure, such as entertainment.

3. Single Mission occasions involve users who want to complete a certain task or gather specific information, then leave the Internet. At 10 minutes, the average session is about the same length as that of Just the Facts, but the 1.5-minute page views indicate the occasion involves more reading than in Quickies and Just the Facts sessions. When on Single Missions, users venture to unfamiliar sites and concentrate on sites within one category (e.g., sports, portals/search engines, entertainment, real estate). E-mail services are rarely visited. In a sample occasion, a woman seeking information about her high-school reunion would start at a search engine to find her school, click around to find the reunions page, learn about the logistics and registration for the gathering, and log off.

4. Do It Again occasions are 14 minutes long and notable for the lingering two-minute page views. The name reflects the strong focus in these sessions on familiar places — users spend 95 percent of the session at sites they've previously visited four or more times. These users repeatedly go to favorite sites for auctions, games, and investments. Typical activities include completing bank

Exhibit 2: **Segment Breakdown of All User Sessions**

Single Mission — 7%
Quickies — 8%
Do It Again — 14%
Just the Facts — 15%
Loitering — 16%
Information Please — 17%
Surfing — 23%

transactions, downloading MP3 files, and participating in chat sessions. These occasions rarely involve searches, since users know exactly where they want to go.

5. **Loitering** occasions are leisurely visits to familiar "sticky" sites, such as news, gaming, telecommunications/ISP, and entertainment sites. They average 33 minutes in duration with two-minute page views. A typical visit might involve reading about favorite TV shows and celebrities on a TV network site. In this type of session, there are few visits to sites that offer quick, practical bits of information, such as weather and shopping sites.

6. **Information Please** occasions average 37 minutes and are used to build in-depth knowledge of a topic. For instance, a user might research all aspects of buying a car — finding the most appealing model, computing trade-in value, finding a dealer, arranging a loan. Unlike Single Mission users, Information Please users are gathering broad information from a range of sites. Information Please sessions tend not to concentrate on a single type of site, or on familiar sites; users are going far afield from their usual destinations. These occasions are heavy on travel and automotive Web sites, but light on telecom and portals/search engine sites. Users tend to jump among linked sites without resorting to a search engine.

7. **Surfing** occasions are by far the longest, averaging 70 minutes, with few stops at familiar sites, as users hit nearly 45 sites in a typical session. Time per page is a minute or more, suggesting wide, but not deep, exploration. Users gravitate to sites that grab their attention immediately — shopping, online communities, and news — and spend little time at portals/search engines and education sites. Since these sessions are not concentrated

in any one category, they appear to be random. One user in our sample, for example, checked e-mail, then read soap opera updates, and then checked prices on amusement parks.

None of the seven usage occasion types was dominant in our study. (See Exhibit 2.) Marketers and retailers are likely to encounter users engaged in all types of sessions, so they should consider how to reach people in all segments.

Why Usage-Based Segmentation?

To visualize the difference between usage-based segmentation and user-based segmentation, consider your own activity on a typical day. You work. You dine. You relax with friends and family. You read. You watch TV. It gets more intricate: Sometimes when you watch TV, you switch from channel to channel, whereas at other times, you are engaged intently with one show, for an hour or more. So, too, when you shop: Sometimes, you browse aimlessly; sometimes, you have a specific goal. These different behavior patterns are what we call usage occasions.

This is not a startling insight; as noted, offline marketers apply the concept of usage occasions all the time. Think about how food-service companies respond to your eating habits. Even though your demographic and psychographic characteristics don't change, your mood does, so over the course of a week, one night you grab a burger at a diner, the next you have an expensive dinner with a client, and on the weekend you pick up some hot-and-sour soup for a stay-at-home meal. You choose a destination — fast-food restaurant, three-star boîte, or local takeout place — that fits your current mood and needs. The challenge for food-industry executives is to decide which occasions they want to serve. They must create for-

Exhibit 3:
Percentage of Users Who Engage in One or More Session Types

Number of Unique Session Types

mats and brands that accommodate the widest coherent range of eating occasions. At the extreme you can see how occasions don't mix — a convenience store with a fancy dining room in the back simply isn't practical.

The same fluid behavior patterns appear online. In applying our usage-based segmentation model to the Web, we stripped away the demographic, attitudinal, and behavioral faces of the user, and looked strictly at occasions and the behavior therein. This approach yielded the seven sharply drawn session types. People engaged in these usage occasions promiscuously; indeed, 44 percent of our sample exhibited, at one time or another, all seven patterns, and fully two-thirds showed up in five or more session types. By contrast, only 12 percent engaged in one session type at all times. (See Exhibit 3.)

At first glance, separating the user from the usage occasion appears merely to underscore the frequency of common forms of behavior. None of the session types is dominated by a single demographic group. Girls ages 12 to 17 are just as likely to engage in a Loitering session as are professional men ages 30 to 50. Of course, there are still important differences in what various groups of consumers do in similarly constituted sessions. Whereas Loitering girls may be interested in looking up entertainment sites with the latest gossip on the teen idol Ricky Martin or the Backstreet Boys, the middle-aged male Loiterer may be more inclined to linger at his favorite investment site, tallying the week's impact on his technology stocks.

Yet these common behavior patterns have important implications for marketers, and tactical insights abound when we look closely at the dynamics of the seven usage occasions. By examining how the four session variables (session length, time per page, category concentration, and site familiarity) define the different segments, a marketer can identify behavioral patterns that can help in the creation and placement of communications. Loitering and Surfing sessions, for example, both involve visits to sites with which users are already very familiar. But the occasions' category concentrations — 66 percent for Loitering and 26 percent for Surfing — show people in Loitering sessions are far more highly focused on a discrete set of categories, whereas people in Surfing sessions engage more in seemingly pointless meandering, skimming through a number of different topics but not getting deeply involved in any one subject. Based on these differences in the pace and breadth of sessions, it's likely that, depending on the usage occasion in which they are engaged, some people will be open to a range of messages, others will pay attention only to highly targeted messages, and others simply will whiz by anything not directly related to the purpose of their session.

Fixing Marketing's Big Flaw

A basic flaw in Internet marketing is that marketers have failed to consider the significance of these differences in usage occasions. Instead, Internet marketers have bought into a "steady-state" theory of consumer behavior, imagining that each individual engages in a single, dominant type of behavior online, and that this user can be identified, communicated to, and sold to at all times, using solely conventional segmentation methods. "If I know the

consumer," these marketers and their consultants are saying, "I can create the ad. And on the Internet, I can use that ad any time I run into the consumer." The fallacy should be obvious; it's roughly equivalent to creating an ad appropriate to a given demographic group and then assuming you can run the same advertisement on *The Simpsons* and in a church.

Even mass customization, the great hope of Internet marketing, fails when it's predicated on user characteristics (whether gleaned from cookies, site registrations, or other means) without considering usage characteristics equally. True, an advertiser can easily send very different banner ads to a 24-year-old graduate student and a 54-year-old CEO visiting the same business-news site. But if the content and placement of those banners aren't also appropriate to the type of usage session the student or the CEO is in, the ads will fail. To be sure, demographics can still be critical. The student, for example, may prefer country music, and the CEO may like opera. But a grad student in a Quickies session may not be amenable to a sales pitch at all, no matter how good the offer on that hot new release from the Dixie Chicks.

Internet retailers make the same mistake as marketers, assuming they can create inflexible Web environments geared to one type of user — or, like offline food-service companies, geared to one type of usage occasion. This severely limits e-tailers' opportunity to reach deeply into all their potential markets, both to drive sales and to enhance customer loyalty.

The great opportunity in online marketing is to use occasionalization to identify when people are most open to your marketing goals. By applying both usage occasion data and demographics, online marketers will raise the odds of communicating with their target consumers at the time those consumers are most likely to pay attention to and be influenced by the message. Similarly, online retailers can tailor their environments in real time to meet the interests of not only the user, but also the occasion.

Use Knowledge, Not Guesses

As our taxonomy shows, usage-occasion type suggests a great deal about what users are doing at a particular time. Armed with those insights, online marketers and retailers can gear their strategies and tactics to the realities of online behavior — especially the fact that users vary their behavior greatly, and that their interest in hearing from marketers consequently varies from occasion to occasion.

For marketers, this means an opportunity to move beyond "best-guess" message placement, which is based on television's reach and frequency approach: Knowing the demographics of the audience, marketers place ads on a TV program based on its viewer numbers (reach), and the number of times those people watch it (frequency). This is marketers' best guess on where they can reach their target audience. In Web terms, the reach and frequency method puts ads on sites that attract a certain number of visits from a certain demographic segment. The moods or motivations prompting the visits are not a factor.

Occasionalization on the Net allows marketers to access more users more effectively, by pinpointing when users are most likely to be receptive to the specific message, based both on the relevance of its content and on users' potential to become engaged in that content. Consider this analogy: Just as drivers don't pay attention to billboards when speeding to the emergency room, Web users in a Quickies session find banner ads a nuisance. In those cases, it's best to leave users alone, and apply resources to those occasions when they are likely to be more responsive.

One of our major findings is that three usage occasion types — Loitering, Information Please, and Surfing — are more likely to involve shopping than others. They share an interesting relationship: They are the lengthiest sessions, ranging from 33 to 70 minutes. Page views are one to two minutes; these users are likely to linger on a page, so they can be exposed to different messages. Marketers have their best shot at connecting with Internet users during these sessions. Users are not in a hurry and they usually go to familiar sites, and their interests take them across categories (Information Please and Surfing users spend less than half their time at their main categories).

How can marketers detect these usage occasions? Tracking previous banner-clicks or purchases and the

time a user spends on a site and its pages is one way. Noting the type of sites visited is another: People in Loitering, Information Please, and Surfing sessions go where there's lots of content — things to read (as at Salon), games to play (Gamezone), and people to chat with (Parentsoup). Additional site characteristics that indicate users are in these occasions include a large number and size of graphics (during these sessions, users don't mind long download times) and a registration requirement (they're visiting a site they like enough to provide personal data).

To reach users in these session types, marketers could post messages meant to generate click-throughs to their own sites and to build branding awareness, since during these occasions users will be exposed to messages for a relatively long time. Content sponsorship, which associates favorite content with a particular brand name, is another approach. Surfing occasions may seem like a long shot for marketers because users' behavior suggests impatient, impulsive clicking. However, if a site or message grabs their interest, they will likely pursue it. Boldly designed or worded messages, then, could appeal to impulse users attracted to novelty. An offline equivalent might be the magazine and candy racks at supermarket checkout lines.

The other usage occasions — Quickies, Single Mission, Just the Facts, and Do It Again — are a mixed bag for marketers. The sessions are shorter overall (from one to 14 minutes), but the page views can be lengthy, depending on the dynamics of the session (from 15 seconds for Quickies to two minutes for Do It Again). Users in these occasions are less inclined to buy than are those in the three other sessions, so click-throughs should be the goal only in very specific situations.

For example, users in Single Mission sessions are open only to messages related to the purpose of the session. Despite the awful performance of search-triggered banner ads on portal sites, a Single Mission consumer may be one of the few users who can provide a good return on a banner advertising investment. A woman with a specific task — perhaps shopping for a wedding dress — might notice an ad from a discount bridal shop, or a link to a site that customizes wedding invitations. However, she is probably not going to be distracted by an offer to sign up for an online music club.

Developing Online Strategies

Selecting the appropriate usage occasion is an important step in developing an online marketing plan. Consider a well-known, branded marketer of a new consumer electronics product — one supported by a fair amount of mainstream advertising. The company wants to use the Internet to market its gadget to young buyers, ages 12 to 25. As in the offline world, the marketer can select from a number of campaign goals — from building brand awareness, to creating communities of brand zealots, to interacting directly with the target consumer. In this case, since consumers are already generally aware of the product and the brand, the marketer decides to focus on positioning its brand as hip and cutting edge.

Usage occasions are the critical link in designing an effective online campaign, because not all session types are conducive to brand positioning. That goal requires an occasion like Loitering, in which the target consumer will probably spend a relatively long time on each page, and therefore will be more likely to absorb the message and develop the desired brand associations.

Having decided to target Loitering sessions, the marketer can determine the site categories its demographic target is likely to visit. Youth-oriented entertainment or gaming sites, such as mtv.com and iwon.com, probably will be high on the list. Finally, tactics can be selected that best allow the marketer to establish a clear brand position for its product with its target consumer. In this case, appropriate tools include pop-ups that link to popular co-branded content and contest sponsorships.

For online retailers, the executional challenge, and in fact the opportunity, goes beyond effective targeting to

Usage occasions are the critical link in designing an effective online strategy. A one-size-fits-all site fails because it can't morph to users' moods.

include the best ways to serve and retain customers. A one-size-fits-all site fails because it lacks any mechanism to distinguish among occasions and guide users to a format relevant to their mood. Continuing our dining example, such a static site is like a restaurateur offering everyone who comes in the door a bucket of fried chicken, when some want pizza and others want filet mignon and a bottle of fine wine. Although such flexible and responsive service is impractical for an offline restaurateur to carry out, it's essential for an online retailer.

A successful e-tail site should, in fact, show a different face to individual users based on their occasion. A rapid, no-frills, self-service experience (marked by text-only pages and no pop-up ads) should be provided to users engaged in Quickies and Single Mission occasions, whereas a full-service option, with video, pop-ups, and personal shoppers, should appear to users in Loitering and Information Please sessions. Retailers who match the experience to the occasion will give new and existing customers a reason to keep coming back, leading to greater loyalty and more sales.

Morph to Users' Moods

To date, no Web marketers or retailers have the technological capability to fully recognize usage occasions in real time or the flexibility to instantaneously respond to them with the appropriate interface. The good news is that these technologies (albeit not yet the actual algorithms) are well within reach. And the best sites — Yahoo and Amazon, for example — are becoming more responsive to individuals through personalization, although this personalization is not the same as automatically morphing ads and sites to reflect user occasions. While waiting for technology to catch up to their needs, marketers can

begin moving from user-based segmentation to occasionalization with these methods:

• Collect usage-occasion statistics and cluster them according to the "seven usage occasions" taxonomy.

• Compare the occasions to your strategy and site offering, then adjust the site to the occasions or give arriving users a choice of Web experiences to fit their interests.

• Modify Web capabilities in light of user patterns so you can alter pages or messages in real time.

• Apply what you've learned from occasionalization to other parts of your marketing. For instance, if you are using CRM tools to send a follow-up message to someone who visited your Web site, craft the message to reflect the occasion that prompted the visit.

Occasion-based segmentation has the potential to create entirely new marketing approaches that harness all the Web's technological power. Occasionalization expands the reach of marketing by dynamically choosing a marketing or retail format that is in the right place at the right time. For that to happen consistently, occasion-based marketing must become more than an occasional occupation. ✚

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Resources

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