

Why Did They Do It?: Voice of the Customer

So far, we've looked at how to link what visitors did on your site with the goals you're hoping they'll accomplish. We've seen how to segment visits so you can understand what's working and what isn't, and how to experiment iteratively in order to optimize the effectiveness of your website.

But no amount of optimization will save you if you don't understand what visitors wanted to accomplish in the first place.

Understanding your market's real motivations is difficult at best. According to Lou Carbone of Experience Engineering, Inc., 95 percent of people's motivations are subconscious (www.smeal.psu.edu/isbm/documents/0206msum.pdf). People seldom say what they mean. Sometimes they're trying to conform to the interviewer's expectations. Sometimes they want to hide socially unacceptable biases—racism, ethical beliefs, and so on—that nevertheless affect how they behave (the *Bradley effect* is one example of respondents giving more socially acceptable responses that differed from their actual behavior: http://en.wikipedia.org/wiki/Bradley_effect).

Often, people simply don't know why they do what they do. Their unconscious mind has decided how to act long before their conscious mind knows about it, leaving people to rationalize their behavior after the fact (www.mpg.de/english/illustrationsDocumentation/documentation/pressReleases/2008/pressRelease20080414/index.html).

That's a frightening prospect, particularly for analytically minded web operators who just want to crunch numbers and measure impacts. Companies invest heavily in consumer research and focus groups. Using eye tracking, recording, surveys, and interviews, they try to get an idea of what's inside their customers' minds. Despite all this, delving into visitor motivations is at best a soft science.

The best way we have to discover our visitors' intentions and concerns is to ask them. Online, we use Voice of the Customer (VOC) technologies. VOC collects customer feedback for analysis and review. Though it affords us only a glimpse of what's on our visitors' minds, that glimpse can be invaluable.

The Travel Industry's Dilemma

In the early days of e-commerce, the best businesses were the ones that had a tremendous amount of information to search and sold big-ticket items: real estate, used cars, and travel. In each of these, the Web fundamentally changed an entrenched sales model where the realtor, salesperson, or agent knew more about the market than the buyer did. Once individual consumers could learn as much about the neighborhood as the realtor, the premium that realtor could charge diminished. Consumers booked their trips online and searched for used cars on eBay.

There's one thing websites can't do as well as humans, though: understand what people are thinking.

Consider, for example, the large travel sites. Companies like Expedia, Travelocity, and Priceline once faced a huge problem with abandonment. Visitors would search for a hotel, find one they liked, check rates and availability—and then leave. This high abandonment rate frustrated all attempts to fix it. The sites tried offering discounts, changing layouts, modifying the text, and more. Nothing would stop potential buyers from abandoning their bookings.

Then one of the sites decided to survey its visitors with open-ended questions like, “Why did you come to the site?” The site's operators quickly discovered that many visitors weren't planning on booking a room at that time; instead, they were simply checking availability. And when they *did* want to book, they were comparing brands for those that matched their hotel loyalty programs.

In other words, the reason they thought visitors were coming to their sites—to book hotel rooms—was often wrong. Instead, visitors were checking whether rooms were free below a certain rate, or trying to find a deal on their favorite hotel chains. Both behaviors were bad for the sites' businesses, since they reduced conversion and undermined the free market on which the discount travel sites relied. The site's operators had a different set of goals in mind than visitors did, and the symptom of this disconnect was the late abandonment.

With this newfound understanding of visitor motivations, travel sites took two important steps. First, they changed the pages of their sites, offering to watch particular searches for the customers and tell them when a deal came along, as shown in [Figure 7-1](#).

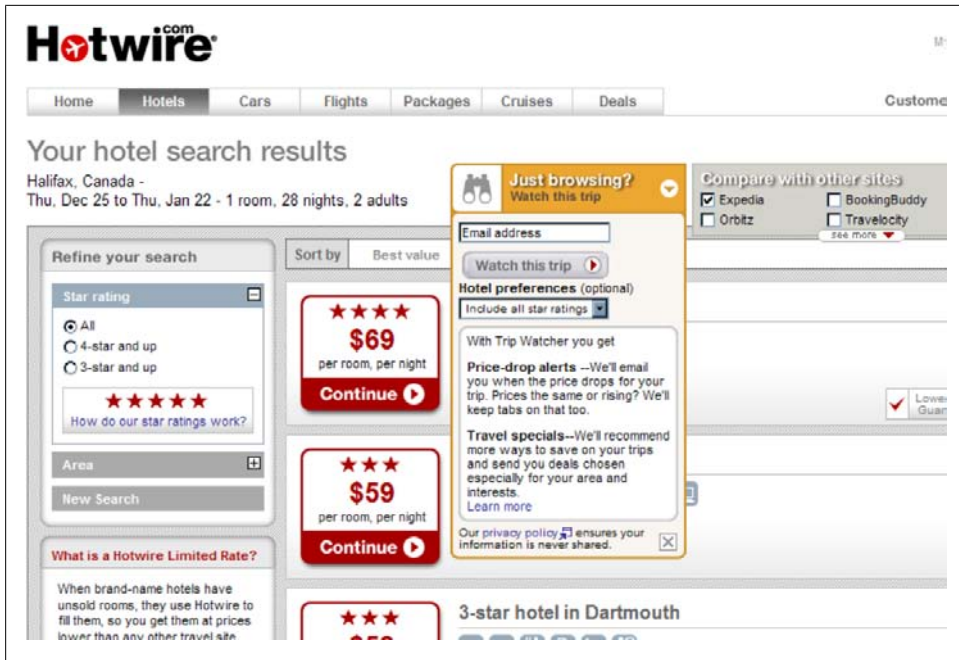


Figure 7-1. Hotwire's "Just browsing?" prompt

Second, they moved the purchasing or bidding to the front of the process, forcing the buyers to commit to payment or to name a price before they found out which hotel they'd booked. This prevented window-shopping for a brand, while allowing the site operators to charge discounted rates.

The results were tremendous, and changed how online hotel bookings work. Today, most travel sites let users watch specific bookings, and many offer deeper discounts than the hotel chains themselves as long as customers are willing to commit to a purchase before finding out the brand of the hotel.

They Aren't Doing What You Think They Are

The lesson here is that your visitors might not be doing what you think they are. While sometimes—as in the travel agency model—they're still doing something related to your business, there are other times when their reasons for visiting are entirely alien.

Consider, for example, online games like PMOG and WebWars. In these games, players install browser plug-ins that let them view websites in different ways than those intended by the site operator. In PMOG, a user can plant traps on your website that other players might trigger, or leave caches of game inventory for teammates to collect.



Figure 7-2. A WebWars player competing for the Boingboing.com website in a game, rather than interacting with it

In Webwars, players compete for dominance of popular websites based on the stature of that site in a web-wide version of the board game *Risk*, as shown in [Figure 7-2](#).

Other “overlays” to the web let people comment on sites using plug-ins like firef.ly—shown in [Figure 7-3](#)—or use site content for address books and phone directories, as Skype does.

VOC may not show you why these people are visiting the site—indeed, there’s no easy way to tell they’re playing a game on your site, other than joining their community and playing along with them, which we’ll look at in [Chapter 11](#) when we turn to community monitoring.

These plug-ins and overlays might be extreme examples, but they underscore just how disconnected we often are from our visitors’ intentions and motivations.

What VOC Is

At its simplest, VOC is just a fancy term for surveys that solicit feedback about your site or your organization. The invitation may come from a pop-up message when visitors first arrive at your site, or from a feedback button on a page. It may even come from an email message that you send to customers.

The surveys use a variety of questions and formats to gauge how respondents feel about things. They also collect data on the respondents so that analysts can correlate the responses to specific groups.

There are four main reasons for companies to conduct VOC studies.

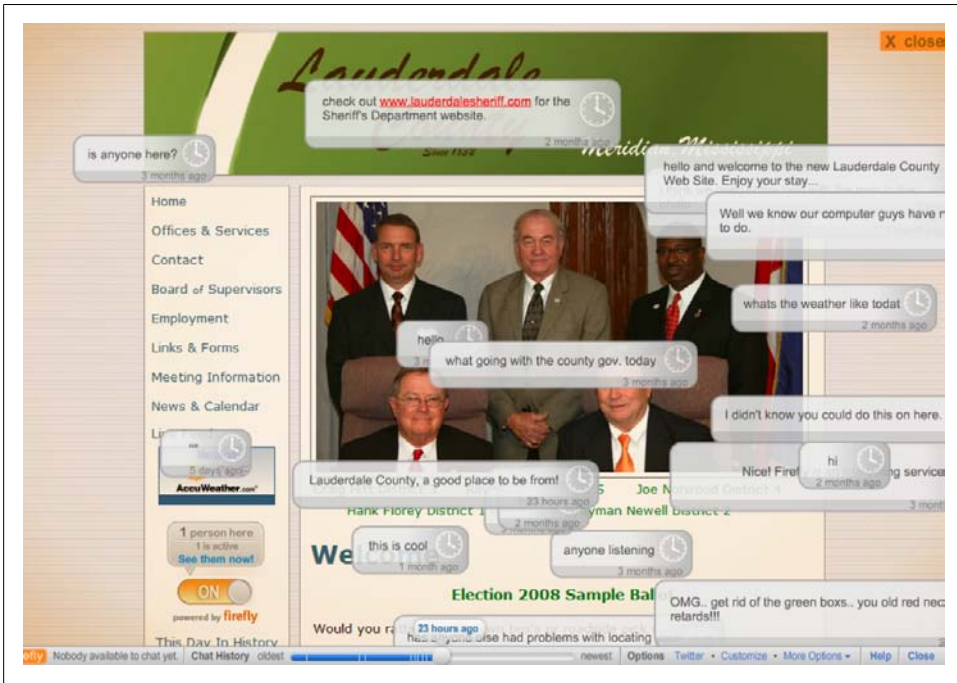


Figure 7-3. The Fort Lauderdale Sheriff's Office website, showing Firefly chats happening atop the site

To get new ideas

Your customers may have motivations or concerns you're not aware of, and asking them can yield new ideas. Once you have an idea, you need to then find out whether it is valid and applies to a broader audience, or is limited to just a few respondents.

To evaluate things you can't find out elsewhere

This can be particularly helpful in evaluating your competitive environment. For example, if you're running a media site, you may want to identify direct competitors (other media sites, for example) and indirect competitors (television or movie theatres) your visitors are aware of.

To see whether improvements worked

This may be a simple evaluation—asking for a user's impression of a new feature—or it may involve comparing satisfaction scores before and after an upgrade to see whether users prefer the new approach.

To collect demographic data (such as age and income) that you can't get elsewhere

This information provides new dimensions along which to segment visitors and learn for whom your site is working best or worst. If you're running a media site, you'll also need independently verified demographic data to attract advertisers.

Let's look at some of the things that VOC studies deliver.

We value your feedback. Please share your thoughts about your experience today. A maximum of 500 characters is allowed.

1. What were the most positive aspects of your experience on CIO.com today?
 500
2. What were the most negative aspects of your experience on CIO.com today?
 500
3. What could we add to CIO.com to serve you better?
 500

Figure 7-4. Open-ended questions can generate insights and unexpected topics for further research

Insight and Clues

First and foremost, VOC gives you clues. It's impossible to get inside your customers' heads and understand their motivations. Many of their motivations are unconscious, so they couldn't tell you why they did something even if you asked them directly.

Mohan Sawhney (www.smeal.psu.edu/isbm/documents/0206msum.pdf) of the Kellogg School of Management says:

Customer insights do not come from quantitative market research. You cannot generate insight out of numbers. Numbers help you to validate insights. A customer insight is a fresh and not-yet obvious understanding of customer beliefs, values, habits, desires, motives, emotions or needs that can become the basis for a competitive advantage. You have to go deeper than what customers themselves say. Insights are not immediately apparent. Anomalies are an excellent starting point for generating insights.

However, you *can* ask open-ended questions like the ones in [Figure 7-4](#) and review the feedback for clues. It's often open-ended responses like these that yield the most insight.



Throughout this chapter, we're going to use examples from several on-line surveys we've seen over the last year, administered by multiple VOC services. We don't mean to pick on them—or endorse them—but we *should* thank them. They're trying to learn more about their visitors, and even when they do so clumsily, they're still well ahead of the majority of sites on the Web.

Sifting through hundreds of responses isn't always easy. Fortunately, there are tools and visualizations, such as tag clouds or concordances, that can tease common themes from this kind of unstructured data. By correlating such visualizations with scorecard

responses, you can make statements such as, “People who scored their visits badly mentioned these keywords most often in their feedback.”

Subjective Scoring

VOC is excellent for collecting subjective information. Suppose you’re trying to accomplish the goal of fostering a sense of community. A question like the one in [Figure 7-5](#) can tell you whether you’re achieving that goal in the minds of your visitors.

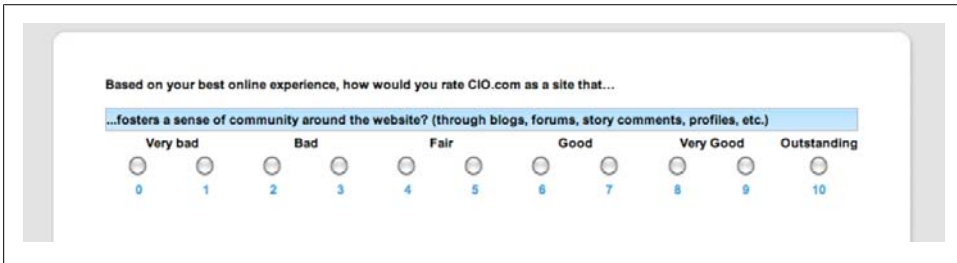


Figure 7-5. Using a range of subjective rankings (known as a Likert scale) is a good way to capture visitor impressions

Unfortunately, many companies first make changes to their sites, then survey to see if the changes worked. This doesn’t provide the comparative before/after data that you need to determine whether your change actually had an impact. It’s better to launch a VOC survey before a change to develop a baseline against which future adjustments are made.

Demographics

Every website has a target audience in mind. When you launched the site, you intended it to be used by a certain class of visitor. Any marketing message works best when it’s tailored to a specific audience. If your actual visitors aren’t who you think they are, you may need to adjust your messages, or even your business, accordingly.

Finding out whether your intended visitors match your actual visitors can be hard to do with technology, so sometimes you just have to ask them.

If you want to segment your user population, it’s a good idea to ask for demographic data, like gender and age ([Figure 7-6](#)). Ensure you are not violating any legislation on the storage of personally identifiable information, however. Some regions require that you let respondents opt out of specific questions (www.casro.org/codeofstandards.cfm).

Which of the following ranges includes your age?

- ☐ Under 18 years old
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65 years old or more
- ☐ Prefer not to say

Figure 7-6. A demographic survey question

Surfographics

We call environmental data that relates or affects someone’s online activity *surfographics*. In other words, anything that describes a user’s environment while they surf—like accessibility tools, or multiple computers per household—are surfographics characteristics. It’s extremely important to track, and is often overlooked. It includes use and behavioral data that can affect the accuracy and usefulness of your other web monitoring data.

From how many separate computers have you accessed this site in the last month?

(Please count all the desktops and laptops that you have used)

- ☐ None (I only access this site using mobile phones / devices)
- ☒ 1
- ☐ 2
- ☐ 3
- ☐ 4 or more computers

From how many separate mobile phones / devices have you accessed this site in the last month?

(Please count every mobile phone, BlackBerry, PDA, etc. that you have used)

- ☐ None (I only access this site using desktop / laptop computers)
- ☐ 1
- ☐ 2
- ☐ 3
- ☒ 4 or more mobile phones / devices

Including yourself, how many other people would you estimate have accessed this website using this computer in the last month?

- ☐ 1 - I am the only one
- ☒ 2
- ☐ 3
- ☐ 4 or more

Figure 7-7. Surfographic questions on computer use help improve unique visitor counts

Cookie disambiguation

If you're running a media site, one of your most important metrics is audience size—how many people visit your website. Most organizations count this by measuring the number of unique cookies that request data from the site on a given day, but those numbers are wrong. And it's not just deleted cookies that skew unique visitor count—one person with several computers, or one computer with several users, can interfere with a proper assessment of readership.

If you use a survey like the one in [Figure 7-7](#) to collect data on how many computers visitors have or how many people share a computer, you can adjust your readership numbers accordingly.

Familiarity with web technologies

Some visitors are extremely comfortable with the Web, while others only discovered email last week. You'll get dramatically different results to questions like those in [Figure 7-8](#) depending on the respondent's experience with the Internet, and it's important to tie this data to the rest of their responses.

Where are you accessing the Internet from **right now**?

- ☒ Home, using a broadband connection
- ☐ Home, using a dial-up connection
- ☐ Work, using a broadband connection / office network
- ☐ Work, using a dial-up connection
- ☐ School / College / University
- ☐ Someone else's home
- ☐ Another location using my own equipment (e.g. wireless hotspot, hotel or mobile dongle)
- ☐ Another location where internet access is provided (e.g. internet café, library or kiosk)
- ☐ On the move via a mobile phone, PDA or handheld device
- ☐ Elsewhere

Is the computer you're using right now...

- ☐ Used only by you
- ☒ Used mostly by you, and occasionally by someone else
- ☐ Used frequently by you, but often by someone else
- ☐ Shared by many people

Next we'd like to ask you a few questions about your use of the internet in general.

When did you first start using the Internet?

- ☐ Less than 6 months ago
- ☐ Between 6 months and a year ago
- ☐ 1 to 2 years ago
- ☐ 2 to 3 years ago
- ☐ 3 to 4 years ago
- ☐ 4 to 5 years ago
- ☐ 5 to 6 years ago
- ☐ 6 to 8 years ago
- ☐ 8 to 10 years ago
- ☐ 10 years ago or more
- ☐ Don't know

How often do you access the Internet nowadays?

(By "access" we mean from any location, whether it be your home, work, educational establishment, Internet café, other location or on the move via mobile phone or PDA, etc.)

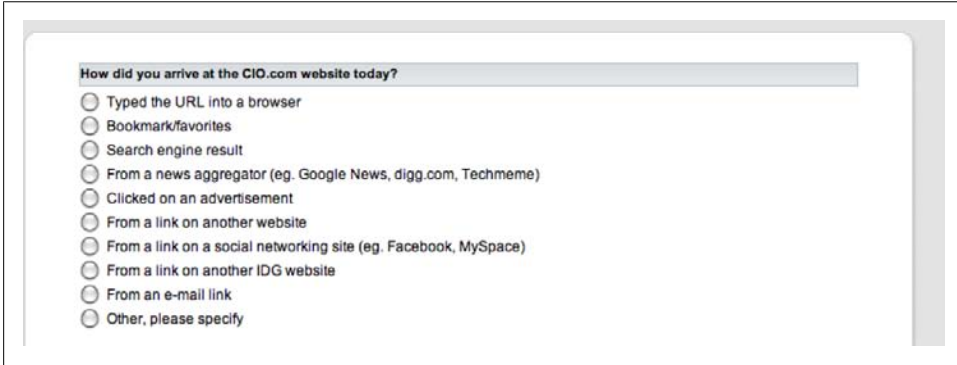
- ☒ Every day
- ☐ Most days
- ☐ 2 - 3 times a week
- ☐ About once a week
- ☐ About once a fortnight
- ☐ About once a month
- ☐ About once every two or three months
- ☐ About once every six months
- ☐ Less often
- ☐ Don't know

Figure 7-8. Surfographic questions designed to measure the respondent's use of web technologies

This is also important information for web designers and usability testers, as something that seems obvious to one segment of your audience may be opaque to another.

Collection of Visit Mechanics Unavailable Elsewhere

Your web analytics tools should show you where your visitors came from. Some traffic sources can't be tracked, however, and in these cases it's acceptable to ask visitors how they found you, as shown in [Figure 7-9](#).



How did you arrive at the CIO.com website today?

- ☐ Typed the URL into a browser
- ☐ Bookmark/favorites
- ☐ Search engine result
- ☐ From a news aggregator (eg. Google News, digg.com, Techmeme)
- ☐ Clicked on an advertisement
- ☐ From a link on another website
- ☐ From a link on a social networking site (eg. Facebook, MySpace)
- ☐ From a link on another IDG website
- ☐ From an e-mail link
- ☐ Other, please specify

Figure 7-9. One important use of VOC is to determine the source of a visit, particularly ones in which referring URLs aren't available

For example, a visit that began with a desktop email client or a desktop microblogging client will lack a referring URL—both appear to have been typed into a browser. And yet one started with an email message from a friend, while the other stemmed from a community discussion on Twitter.

You should still compare this data to analytics information—if a visit came from a search engine, but the visitor claims it was from a social network, you've learned that this particular visitor doesn't pay a lot of attention to how he finds out about destinations on the Web (or tends to lie!), and you can view the rest of his results with that in mind.

Jonathan Levitt of VOC provider iPerceptions notes that his firm sees “two distinct measurements of visit mechanics: the path to the site (i.e., ‘direct referrer’) and the medium that most influenced the desire to visit (i.e., ‘print media,’ ‘broadcast’, and so on).” In other words, where someone came from and what motivated him to visit may not be the same thing.

It's also a good idea to find out where your visitors hang out, so you can be sure to include those destinations in your community monitoring strategy with a question like the one in [Figure 7-10](#). With the rapid growth of social networks, it's important to keep your list of sites current so users can quickly indicate the ones they visit.

Which of the following social networking sites do you use? Please select all that apply.

<input type="checkbox"/> Facebook	<input type="checkbox"/> MySpace
<input type="checkbox"/> LinkedIn	<input type="checkbox"/> Ryze
<input type="checkbox"/> Tribe.net	<input type="checkbox"/> Other, please specify
<input type="checkbox"/> None - I don't use any social networking sites	

Figure 7-10. Surveying respondents for their social network use

What VOC Isn't

Now that we've addressed some of the things VOC tries to do, let's look at some things it *isn't*.

Many of the criticisms leveled at VOC—that it's unscientific or doesn't yield insights that can be applied to all visitors—aren't really fair. VOC doesn't make these claims, but many web operators who've misused VOC give it a bad name.

Here's what VOC never set out to be.

It's Not a Substitute for Other Forms of Collection

VOC is not an excuse to abandon all other forms of collection. In many cases, VOC surveys ask visitors questions that are unnecessary, because the answers can be found elsewhere. This is a sign that an organization's web monitoring tools are siloed: the people who know about performance aren't talking to the folks who run analytics, who in turn aren't sharing data with the people in usability.

Unnecessary questions reduce survey completion rates because the longer a VOC survey is, the more likely people are to abandon it rather than giving you the insights you need. So if you can get an answer somewhere else, don't waste your respondents' time—they'll only give you three to five minutes of it.

It's Not Representative of Your User Base

Perhaps the biggest criticism leveled at visitor surveys is their sampling bias. It's true that only a certain kind of visitor will respond to a survey, however good the invitation. While larger samples can mitigate sampling error, the answers you get still won't be representative of your user base. You're less likely to get responses from power users who are in a hurry, and even then, they're probably only going to offer feedback in certain situations. And you're more likely to hear from zealots and outliers.

This criticism misses the point: VOC should capture insights that you may be able to investigate. In the travel site case mentioned above, a few responses saying that visitors were just checking availability prompted the site operators to research further and

confirm that this was, in fact, the case for many of their customers. Then, through analytics and experimentation, they were able to adapt their sites.

It's Not an Alternative to a Community

The best way to understand the needs, emotions, and aspirations of your target market is to visit it where it lives—in Facebook groups, chat rooms, Twitter feeds, news aggregators, and blog comment threads. You can use VOC to find out where your market hangs out, or to dig deeper into something you hear online, but you need to marinate in your community to really understand it.

It's Not a Substitute for Enrollment

If you need to constantly poll your market to understand its needs, you should convince visitors to let you contact them through email or RSS feeds. This lets you go back to them several times with additional questions and build your own panel of respondents. Remember, however, that enrolled respondents—and friends you interact with on social networks—are more loyal and “tainted” with opinions. After all, they liked you enough to enroll. So while it's good to survey them, you still need to examine newcomers.

In other words, VOC works best on visitors who you don't yet know, and who are new to the site, as soon as they've formed an opinion of you. Ask them too soon, and they won't have visited your site; ask them too late, and they may have left forever.

Four Ways to Understand Users

VOC technology is deceptively straightforward: ask your visitors questions and analyze the results. Below the surface, however, those questions are the result of a process of research and planning, sample selection, invitation, clustering, segmentation, and reporting.

There are four ways to understand the voice of your customers, as shown in [Figure 7-11](#).

Focus groups

A moderator guides discussion among several topics with a sample of the target market. These provide a great way to understand a customer base that's readily available. Focus groups let you see nonverbal cues, and a skilled moderator can steer the conversation in new directions you may not have considered, based on the participants' feedback.

Online surveys

This is what most people mean when they talk about VOC. Visitors are intercepted during their visits and are asked if they will participate in a survey. While not as

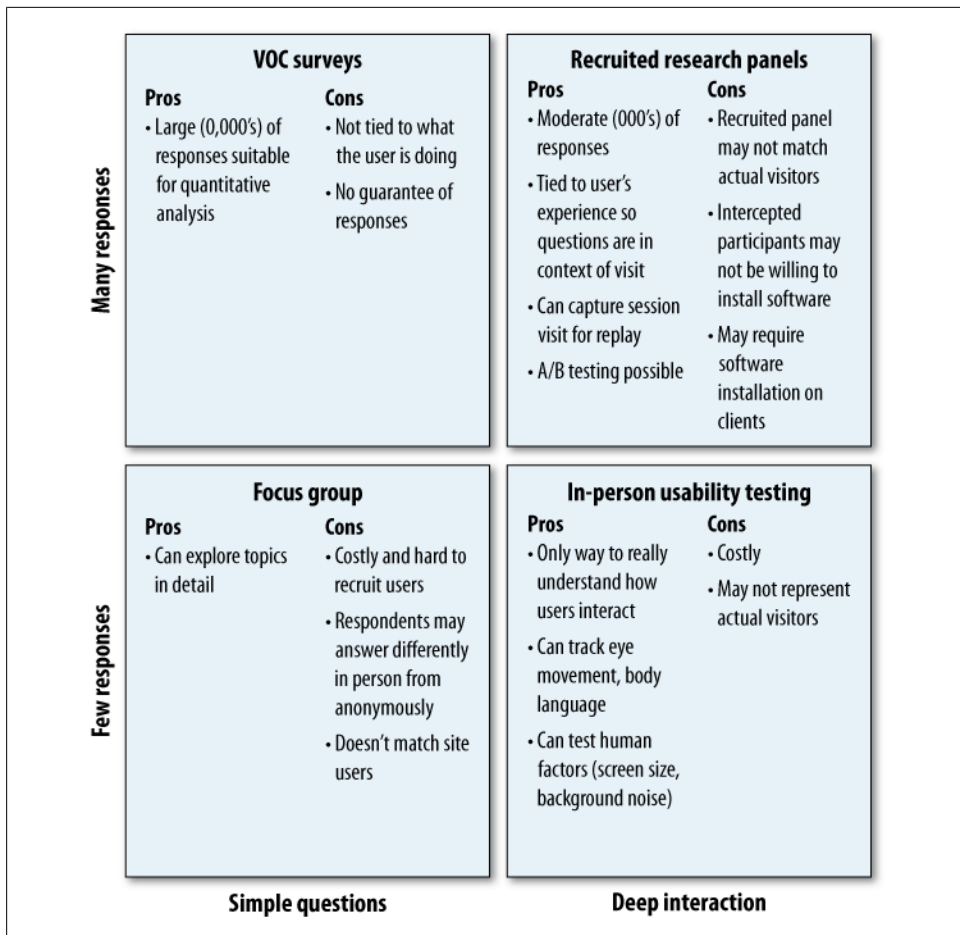


Figure 7-11. Different methods of surveying a site's target market

open-ended as a focus group, online surveys allow you to solicit feedback from hundreds of participants who are familiar with the actual website experience.

Usability analysis

This involves watching a participant as she uses the site. This borders on web interaction analytics (WIA) and may even include eye tracking and other tools to understand how people use a site. Usability analysts often record participants' faces and voices during the session and encourage them to provide feedback.

Recruited research panel services

These combine VOC surveys with interaction capture and run studies across a recruited panel that may include hundreds of users. Participants download a plug-in that tracks their online experiences and occasionally asks them questions related

to the site as they surf. While more costly and invasive than simple surveys, this approach allows a much better integration of what users did with why they did it.

The approach you choose depends on how many respondents you want to survey and on whether you want simple answers or a more in-depth understanding of their experiences as they browse the site.

All site operators should do focus group studies and in-person usability testing. All you need is patience, an observant eye, an open mind, and a belief that the only thing that matters is the user's opinion. When you want to survey a wider cross-section of the market, however, you need to look to VOC solutions, and in particular, online surveys.

Kicking Off a VOC Program

Listening to the voice of your customers requires a few clear steps: planning the study, avoiding known pitfalls, asking the right questions, designing the navigation, integrating the VOC into your website, trying the study out, selecting respondents, collecting data, and analyzing the results.

Planning the Study

Before you give your customers a voice, it's a good idea to think about what you want to learn. If you're just looking for general feedback, a simple button on the website will suffice. But if you want insights, you're going to have to ask them some questions.

It's best to have a specific question in mind. Avinash Kausik suggests four basic questions (which he's rolled into a free service, called 4Q and shown in [Figure 7-12](#), along with VOC provider iPerceptions at <http://4q.iperceptions.com/FAQs.aspx>).

- Satisfaction: "How would you rate your site experience overall?"
- Intention: "What was the primary purpose of your visit?"
- Accomplishment: "Were you able to complete the purpose of your visit today?"
- Details: "What do you value most about this site?" or "Why weren't you able to achieve the purpose of your visit?" Of course, visitors can't answer this until the end of the visit.

These four questions get to the heart of VOC: Why did visitors do what they did?

The goals of the study

If you just want to understand what motivates visitors, some open-ended motivational questions like 4Q's are good. Most of the time, however, you'll have a specific question you want answered, for example, why are people abandoning the purchase? Are people buying for themselves or someone else?

4
Privacy Policy

Which of the following best describes the primary purpose of your visit?

- ☐ Learn about products
- ☐ Create an account
- ☐ Check my account
- ☐ Seek support
- ☐ Learn about company / brand
- ☒ Other Please Specify

Click forward to continue

Figure 7-12. A question from iPerceptions' 4Q service

Imagine that you want to know whether people heard about your website from radio or television advertising. You can either give respondents an open-ended question and analyze the response text for patterns and insights (such as the number of times “Radio” and “TV” appear), or you can give visitors multiple-choice answers (“Radio,” “TV”) and get data that’s easier to calculate, but that may miss some responses (“Blimp”).

Consider the hotel booking abandonment issue we described at the start of the chapter. One way the travel site operator might have found the answer is by asking an open-ended question, such as, “Why did you visit the site today?” There’s a chance that some people will respond, “I was just checking hotel availability and had no plans to purchase.”

On the other hand, the operator might ask several questions that, taken together, suggest a motivation, such as, “Did you plan to purchase something today?” and “Are you checking hotel availability?” The problem with this second approach is that you need a hypothesis. Until you have a clear idea of what to ask, open-ended questions are better. Armed with a hypothesis, you can switch to a multiple-choice format to quantify and validate or repudiate it.

Once you know what you’re trying to learn, you need to decide which survey approach will answer your questions. A simple questionnaire may suffice, particularly if you’re trying to find the answers to known questions.

Often, however, you'll want to segment respondents for further insight:

Before/after comparison

If you want to know whether you made things better or worse by making changes to your site, you need to collect satisfaction data prior to a change, then compare it with results collected after the change.

Demographic comparison

If you want to find out which segments of your user community prefer a particular element of the site, you'll need to collect demographic data (for segmentation) alongside satisfaction data. This may have already been collected for you by services like Quantcast, but you will still need the data so you can segment responses in multiple dimensions.

A/B comparison of two choices

If you want to know which version of your website your visitors prefer, you need the mechanics to show them different versions, then solicit their responses. For more in-depth comparisons, you may want to use a usability testing service and ask respondents which version they prefer, being sure to randomize the version they see first to avoid learner bias.

Comparing the impact of website latency on satisfaction

A good way to understand the economics of performance and capacity planning is to ask users about their perceived experience with page latency and correlate those experiences with actual web latency measurements. For this to work, you need to associate RUM data with the VOC record.

Comparing experience based on actions

You may want to compare user experiences based on how the user interacted with the site. For example, did visitors who used the search tool have a better experience than those who browsed by directory? To do this type of comparison, you need to invite visitors to participate in the study up front, then adjust the questions you ask them based on what they did on the site itself. This means associating web analytics data with VOC survey questions. Some analytics vendors have integrated VOC data, and some VOC providers overlay their results with free analytics tools using plug-ins like Greasemonkey to make it easier to tie survey results to outcomes.

The Kinds of Questions to Ask

Your VOC study will include several kinds of questions: those that segment respondents, those that solicit feedback on something visitors saw, those that check whether visitors perceived elements of the site, those that try to capture the visitor's state of mind, and those that look for general feedback.

Why We Ask Questions We Know the Answers to

Many of the questions in VOC surveys can be answered through other sources. For example, you can usually tell where a visitor is located by his IP address. If this is the case, you shouldn't bother asking visitors directly for their IP addresses.

Sadly, however, many VOC tools ask questions whose answers lie in data collected by other monitoring tools. This is a consequence of the state of web monitoring: pieces of the visitor portrait live in analytics, RUM, WIA, and VOC tools, and are seldom linked properly, forcing analysts to ask redundant questions and use up precious seconds in a survey.

A much more elegant way to answer some of these questions—and not bother the respondent—is to monitor visitors using browser-side JavaScript. For example, you might track whether a visitor subscribes to your RSS feed in a cookie, and include this information in the survey response. This can be technically difficult to implement with hosted services, however, which is why many sites waste visitors' time with questions about activity.

While visitors typically don't shy away from answering such questions, we still think it's a lousy idea to ask questions you already know the answers to, and you should avoid doing it whenever possible by implementing better integration with other monitoring technologies.

Segmentation

Segmentation questions are used to group responses demographically or psychographically, as well as to disqualify respondents. They often solicit personal information, but shouldn't be discriminatory. Any personal data you collect may be subject to a legal review or legislation depending on how it is associated with the visitor's identity.

Segmentation questions can include basic demographics ("How old are you?") or more detailed behavioral questions ("How often do you enter your credit card online?") Recall that questions around online behavior are known as *surfographics*.

You can also segment visitors according to whether they have other interactions with your company, for example, whether they visit your brick-and-mortar retail outlet or subscribe to your print magazine (Figure 7-13).

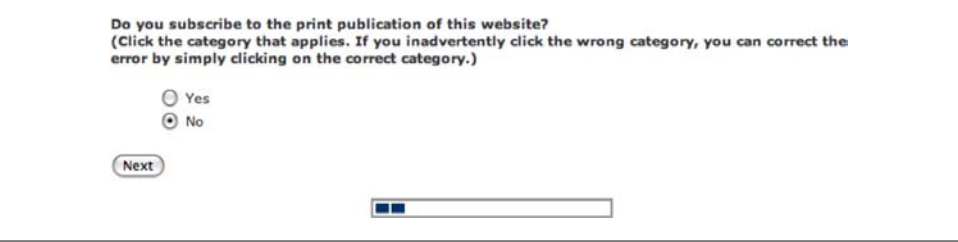
A screenshot of a survey interface. The question is "Do you subscribe to the print publication of this website?" with a subtext "(Click the category that applies. If you inadvertently click the wrong category, you can correct the error by simply clicking on the correct category.)". There are two radio button options: "Yes" and "No", with "No" selected. Below the options is a "Next" button. At the bottom, there is a progress bar showing two steps, with the first step highlighted in blue.

Figure 7-13. Correlating brick-and-mortar behaviors with online behaviors

Evaluation

Once you know which segment the respondent belongs to, you can ask her to evaluate the site. Pairing questions like, “Was it easy to find what you wanted?” with follow-up open-ended responses (“Why or why not?”) will give you a good indication of the user’s goals.

Another useful question to ask is, “How likely is it that you would recommend us to a friend or colleague?” This question is the basis of the Net Promoter Score, and is thought to strongly reflect your visitors’ true intentions and feelings about your business or site. According to research by General Electric, Net Promoter scores correlate closely with a company’s revenue growth (www.businessweek.com/magazine/content/06_05/b3969090.htm).

If the user has completed a transaction as part of a visit, you can ask her about it, but you need to wait until after she has completed the transaction before gathering feedback. There are three ways to accomplish this:

1. Intercept visitors after they have completed the transaction, so that only those who have performed the action you want them to evaluate will get the survey.
2. Use a script on the transaction completion page to let the VOC service know that this visitor needs to be given a different survey.
3. Ask visitors to self-identify (“Did you buy something today?”) and have the VOC service adjust subsequent questions in the survey accordingly.

Recall

What if visitors left your site because they didn’t see what you wanted them to? You may have had the perfect offer for them, but they simply didn’t notice.

If you have actions or content within the site, you can test a visitor’s recall once his session has expired. “Did you notice the ad for a car?” for example, will tell you a lot about why the visitor didn’t click on a particular ad. You can also test a visitor’s recall of marketing campaigns to see whether he heard and remembered advertisements he saw elsewhere.

While you may think content is highly visible, don’t be fooled: in thousands of web usability tests that tracked eye movement (conducted by the Nielsen/Norman Group), so few participants glanced at pictures on the site that the numbers were too small to report. If you’re not seeing conversions, determine whether visitors even noticed the offer.

General feedback and exploration

If you’re trying to glean insights from your visitors, asking them what products or services they’d like to see from you is a good start. You can also verify the clarity of your marketing messages by asking how *they* would explain what you do to others.

Mindset

You can ask motivational questions (“Why did you visit the site?”), as well as those that tell you where a user has been prior to visiting (“Are you surfing with a specific goal in mind, or just browsing the Web casually?”)

Designing the Study’s Navigation

Once you’ve got your questions, you need to think about how to structure the survey. Your survey will have four main segments—introduction, demographics and segmentation, questions and opinions, and conclusion.

During the *introduction* you set the expectations for the respondent. If you want to hide the purpose of the study because you don’t want to bias respondents, explain that you’ll reveal it at the end of the survey. The introduction also states terms of service, contact information, and expected duration.

The *demographics* questions are those you’ll use to segment responses. You may want to ask first (particularly if you want to do a lot of analysis), but if you’re just doing research to try to capture visitor sentiment, you may want to wait until later, since you’ll get more answers to questions placed earlier in the survey.

The *questions and opinions* section is the core of your survey. This is where you provide ratings and ask open-ended questions of participants. It includes recall, mindset, and evaluation questions, as well as general feedback.

In the *conclusion*, thank the visitor, obtain contact information if needed, and close the survey. If you’re offering to share the results with the respondents, here’s where you tell them when to expect those results. You may also wish to ask if you can contact them again in future.

Branching logic

You may want to vary the questions you ask during the questions-and-opinions section based on the demographics you collect about each visitor. For example, if you asked, “Is this your first time visiting the site?” you may have a different set of questions than those you’d ask repeat visitors.

Ideally, you’ll know these conditions beforehand—your analytics tool knows whether they are returning visitors, or whether they bought something, for example. However, that analytics data may not be available in your VOC product. Some VOC tools support branching logic to selectively ask questions as the survey progresses.

Randomizing questions

You may want to randomize question order. This will ensure that all questions get responses even with respondent dropout (though, as noted, if you’re seeing dropout, your survey is likely too long).

Another reason for randomizing the order of questions is to eliminate learned bias: respondents may answer one question differently depending on which questions came before it, and randomizing question order is a good way to control this effect. Learned bias is a common problem with usability tests. When test subjects see two versions of a site in A/B comparisons, they learn from their mistakes on the first version and perform better on the second version, so testers know to try A first sometimes and B first at other times. You should do the same with your questions if your VOC tool will let you.

Control questions

One way to check whether answers are accurate is to ask a related question elsewhere in the survey. You might, for example, ask whether a respondent bought something online in the last year, and then later ask how comfortable he is using a credit card online. You should see a strong correlation between the two, which you will verify during initial testing.

Using control questions like these, you can identify responses that don't seem rational and either eliminate them or downplay them in the final study. This kind of control model is especially important if you're offering a reward for survey completion, since you'll get some respondents who are simply completing the survey to get the reward, and you need to eliminate them.

Why Surveys Fail

There are plenty of pitfalls for anyone assembling a survey. The Society for Technical Communication suggests several steps in gathering questions from stakeholders at <http://www.stcsig.org/usability/newsletter/0301-surveybloopers.html>. Even if you follow these excellent suggestions, however, there's plenty to trip up the unsuspecting web analyst. Figure 7-14 shows the eight main reasons why users didn't complete surveys, according to Katja Lozar Manfreda and Vasja Vehovar in an article titled "Survey Design Features Influencing Response Rates in Web Surveys" (http://www.websm.org/upload/editor/Lozar_Vehovar_2001_Survey_design.pdf).

Since it's hard enough to get the right people to answer surveys in the first place, here are some things you should try *not* to do. The top two results are simply boredom: don't ask people too many questions.

Don't ask for frequency of visits

Asking visitors how often they visit a site (Figure 7-15) is bound to lead to inaccuracy—people don't have good recall of this kind of data. Your analytics tools have a much better record of this information.

If you can't get data from your analytics tool into your VOC tool, however, you'll need to collect this so you can segment responses by visit frequency.

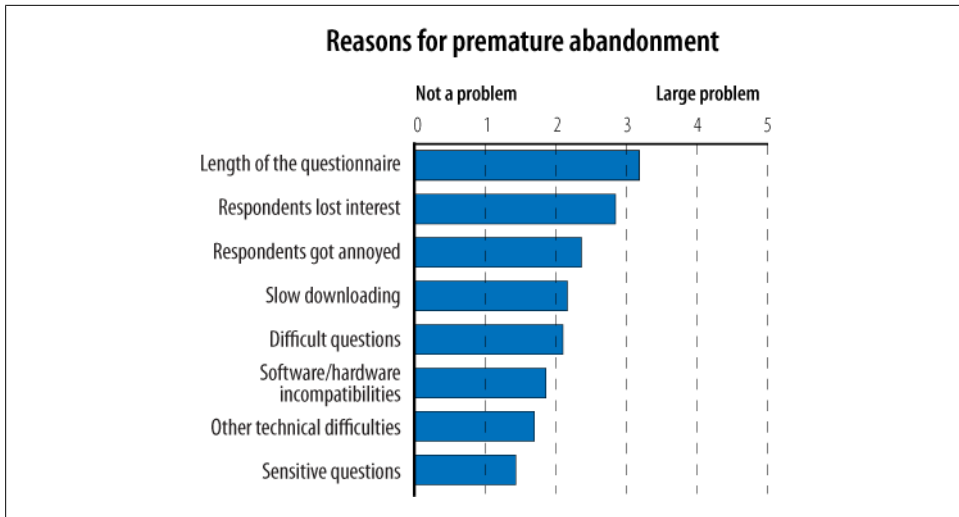


Figure 7-14. The eight main reasons people don't complete surveys

How often do you visit the CIO.com website?

- ☐ More than once per day
- ☐ Once per day
- ☐ A few times per week
- ☐ Once per week
- ☐ A few times per month
- ☐ Once per month
- ☐ Once every 2-3 months
- ☐ Less than every 2-3 months
- ☐ This is my first visit

Figure 7-15. Asking for visit frequency can be a waste of a question if you can get it elsewhere

Don't ask about subscription rates

If the respondent is a newsletter recipient, you should know that from her cookie or the personalization of her login. Linking email recipients to their visits is vital if you want to understand how your users get to your site. In other words, you should already have this data from your analytics of referring URLs and returning visitors, or from your newsletter emailing service.

Don't ask what they just did

Another thing we shouldn't have to ask is what a visitor just did on his current visit (Figure 7-16). In the precious few questions you have, you need to focus on *why* someone did something, not *what* he did. VOC shouldn't be a band-aid for bad web analytics.

Did you subscribe to the site's RSS feed or newsletters during you visit today?

- ☐ Yes, I subscribed to the RSS feed
- ☐ Yes, I subscribed to a newsletter
- ☐ Yes, I subscribed to both the RSS feed and a newsletter
- ☐ No, I did not subscribe to the RSS feed or a newsletter
- ☐ I was already subscribed to the RSS feed or a newsletter

Figure 7-16. Things you should be able to work out without asking your visitors

Based on your best online experience, how would you rate CIO.com as a site that...

...loads pages quickly?

Very bad		Bad		Fair		Good		Very Good		Outstanding
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0	1	2	3	4	5	6	7	8	9	10

Figure 7-17. A Likert scale asking visitors how quickly they think a site loads

This is different from the recall questions we looked at earlier. Asking whether someone saw an ad helps you to understand abandonment. There's no other analytical tool that can tell whether a visitor saw an ad. However, asking a user if she clicked a particular button is wasteful, because we have other ways of tracking that. Don't mistake recall questions that look at visitor perception with those that ask about visitor actions. You shouldn't ask people to recall things that can be more accurately recorded by analytical tools.

Don't use VOC to determine web performance

When it comes to data like web performance, you should be measuring it yourself. Asking users whether performance is acceptable is somewhat useful, because it gives you an idea of their expectations, but if you're not correlating this to the performance they actually received, it's meaningless.

In the example shown in [Figure 7-17](#), we can find out whether users felt performance was acceptable. But were they on a LAN connection or a dial-up modem? Correlating this data to performance would be incredibly useful, since it would give us an idea of what acceptable delay was and help us with capacity planning. On its own, however, it's a waste of your visitors' time—and yours.

Don't ask about loyalty

Analyzing loyalty through VOC is only slightly useful. It's one thing to know the site encourages visitors to return. It's far more meaningful to see if that encouragement

Based on your best online experience, how would you rate CIO.com as a site that...

...encourages you to return?

Very bad Bad Fair Good Very Good Outstanding

0 1 2 3 4 5 6 7 8 9 10

Figure 7-18. A question to assess whether respondents are likely to return

In what region do you reside?

☐ United States

☐ Elsewhere in North America

☐ Europe

☐ Asia

☐ Africa

☐ Oceania

Figure 7-19. Determining a visitor's country of origin can be better done through IP address lookup, making the survey shorter

worked (as indicated by web analytics' loyalty data) than to ask questions like the one in [Figure 7-18](#).

Don't ask for demographic data that you can get from other sources

It's easy to resolve a visitor's IP address to her city of origin ([Figure 7-19](#)); it's positively trivial to ask her what country she's from. Asking this kind of question in a VOC survey is a waste of everybody's time unless you simply can't get it elsewhere. With modern geographic lookups of IP addresses, however, there's no excuse for this.

Don't ask questions they can't answer

Your visitors may not remember everything about their visit, so asking them specific questions about it (like the one in [Figure 7-20](#)) won't yield accurate information.

You might be tempted to prompt visitors beforehand, for example, by saying, "During your visit today, pay attention to the ads you see, as we'll be asking you questions about them." If you do this, however, the answers you get won't apply to other visitors. You'll discourage respondents, increase survey abandonment, and get data that isn't useful.

While we're at it, this is the perfect time to air one of our pet peeves: don't ask visitors about their impressions of a visit before they've visited the site!



To what extent do you agree with the following statement? Overall, the ads I saw contained messages that were credible.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neutral / Don't know
- ☐ Somewhat agree
- ☐ Strongly agree

Figure 7-20. How do visitors answer if they didn't notice the ads on the website?

Don't ask too many questions

It's better to have a few questions answered by many respondents than a large number of incomplete questionnaires. This might seem counterintuitive—after all, if you front-load the survey with useful questions, you'll get lots of answers for those and few for the rest of the survey.

One of the most useful things about surveys is correlation. If you have incomplete surveys, you can't correlate responses to one another and derive the insights you need ("People from China find performance is too slow!" or "Women dislike the advertising on the site").

When it comes to surveys, fewer questions is always better. Pick a question you want the answer to, and get the answer. You can run the other surveys later.

Don't ask a question that won't reveal anything

If you have a question that everyone will answer the same way, don't waste your visitors' time asking it. When you trial your survey, see if there are questions that everyone gives the same answer to. If there are, consider whether asking it will give you any useful data. Perhaps you need to reword it for respondents to give you a variety of responses.

Always give visitors an out

As designers of the website, we seldom imagine all the answers someone might give. We're simply too familiar with the website to ask good questions. When designing a survey, give respondents an answer for every situation. This can sometimes be subtle.

In [Figure 7-21](#), a visitor may have never had a relationship with the site before this visit. To respond that they have no relationship, they need to choose "Other" and then enter "none." It's as though the survey's designers couldn't conceive of somebody having no relationship with them.

Which of the following best describes your current relationship with CIO? Please select all that apply.

- ☐ Current print subscriber
- ☐ Former print subscriber
- ☐ e-newsletter subscriber
- ☐ Subscribe to a mobile feed
- ☐ Other, please specify
- ☐ Current CIO community member
- ☐ Former CIO community member
- ☐ Attended a conference/event sponsored by CIO
- ☐ RSS subscriber

Figure 7-21. There's no way for a respondent to say, "I don't have a relationship"

Discourage lingering

Users tend to dwell over their answers, wanting to go back and edit them. You want to discourage this behavior, partly because it means they'll take too long to complete the survey and partly because their initial answer is likely to be correct.

There's another reason to discourage reflection. Later in the survey, you may ask other questions that are there specifically to test for consistency with previous answers. If respondents can go back and edit their earlier responses, it defeats your ability to cross-reference these control questions and determine whether a respondent was actually answering consistently. Consumer behavior researchers use these control questions to discount some responses when analyzing studies.

Some VOC services automatically advance the survey to the next question when the respondent clicks an answer. While this doesn't give the respondent the ability to correct a mistake before submitting, it also keeps the survey moving along briskly. We're fans of brisk.

Provide room for subjective feedback when no answer applies

In cases where one of the options is "other," you should provide a text box for respondents to type their answers. Otherwise, you may be completely ignorant of an important category of response, as is the case in [Figure 7-22](#).

How did you first find out about this site?

- ☐ Via interactive TV
- ☐ Advert seen outdoors
- ☐ Email newsletter / promotional email
- ☐ Teletext service via TV
- ☐ Advert or link in a newspaper or newspaper supplement
- ☐ Search engine / portal
- ☐ Advert on the radio
- ☐ From friends / relatives / colleagues
- ☐ Banner or online advert
- ☐ Through a high street shop
- ☐ Link from another website
- ☐ Advert in the cinema
- ☐ Guessed web address (URL) from company name
- ☐ Advert on TV
- ☐ Advert or link in a magazine (publication not connected with a newspaper)
- ☐ Other
- ☐ Don't know / can't remember

Figure 7-22. In this case, there is no room for subjective feedback

Integrating VOC into Your Website

Of all the monitoring technologies we've seen so far, VOC is perhaps the simplest to implement. In the case of "intercepted" surveys, where visitors are invited to respond, you simply embed a line of JavaScript within the page that loads the VOC service's scripting logic. Here's an example for iPerceptions' launcher script on www.bitcurrent.com:

```
<!-- Begin: 4q.iperceptions.com --><script  
src="http://4qinvite.4q.iperceptions.com/I.aspx?sdfc=b2523cb8-1064-  
5ca1c10e-a480-421d-a186-3  
fac395d08db&lID=1&loc=4q-web1" type="text/javascript"  
defer="defer" ></script><!-- End: 4q.iperceptions.com -->
```

The steps involved in a VOC submission are outlined in [Figure 7-23](#).

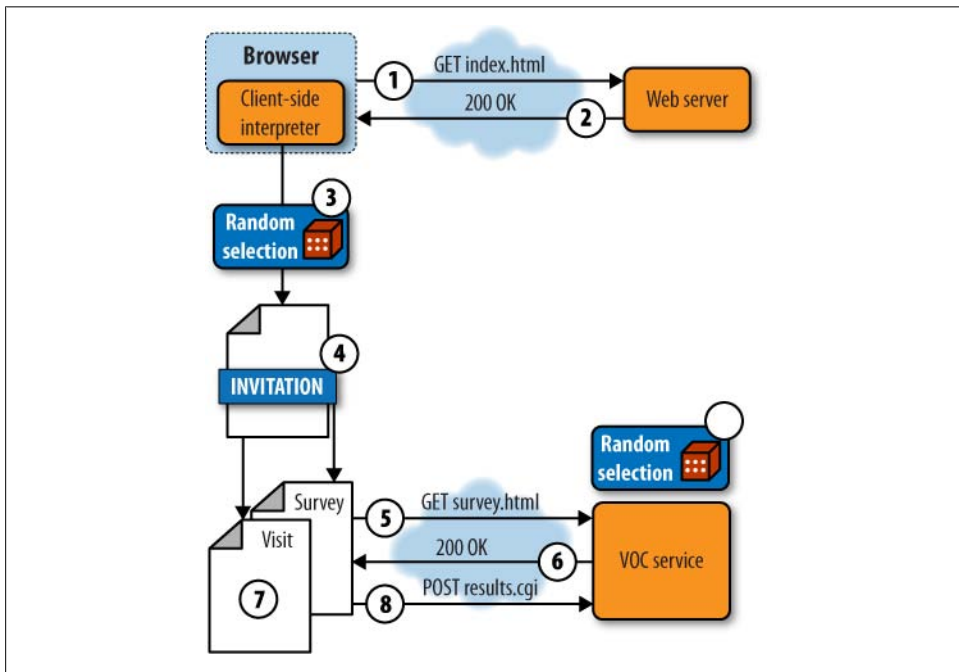


Figure 7-23. Steps involved in selecting, inviting, and submitting a VOC survey

They are as follows:

1. The browser requests a page from the web server.
2. The web server returns the page containing the JavaScript that will launch the survey.

```

<!--Start Kampyle Exit-Popup Code-->
<script type="text/javascript">
var k_push_vars = {
  "view_percentage": 30,
  "popup_font_color": "#000000",
  "popup_background": "#D4E2F0",
  "header": "Your feedback is important to us!",
  "question": "Would you be willing to give us a short (30 seconds) feedback?",
  "footer": "Thank you for helping us improve our website",
  "yes": "Yes",
  "no": "No",
  "text_direction": "ltr",
  "images_dir": "http://cf.kampyle.com/",
  "yes_background": "#76AC78",
  "no_background": "#8D9B86",
  "site_code": 9144165
}
</script>
<script type="text/javascript" src="http://cf.kampyle.com/k_push.js"></script>
<!--End Kampyle Exit-Popup Code-->

```

Figure 7-24. JavaScript for a Kampyle VOC pop up; the `view_percentage` value determines what percentage of visitors are invited

3. A randomizing function, either within the JavaScript (Figure 7-24), which is easier to implement, or through the VOC service, which adds more steps to the process but affords greater control, determines whether the visitor should receive the invitation.
4. Selected visitors are shown the invitation. Note that visitors can be intercepted at the start, middle, or end of a visit.
5. When a respondent agrees to participate in a survey, the JavaScript requests the VOC survey from the service.
6. The survey loads in a new window, often behind the current visit. In some cases, the visitor completes the survey immediately.
7. The visitor finishes the visit.
8. The visitor completes the survey, which is sent back to the VOC service for analysis.

If you don't want a separate interception, you can embed a survey form from services such as Wufoo, SurveyMonkey, or even Google Forms within your site.

Trying the Study

Before you run the study, you need to try it with a test audience that resembles your intended respondents in order to identify any problems with the survey before you roll it out. This can save you time and money. There's a second reason, too: if your actual responses differ significantly from those of your trial group, it's a sign that your respondents may not be a part of the market you thought they were.

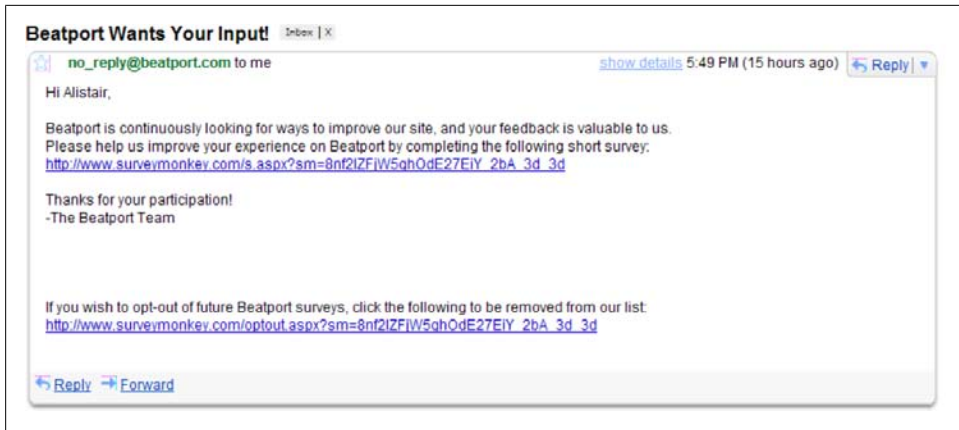


Figure 7-25. A recruitment mail for a VOC survey to existing users

The dry run can be conducted on paper or over the phone, but it's always best to try it as an actual web survey. When trying the survey, check that the test group understands what you are asking—if test respondents express confusion over how to answer the question, adjust it. Finally, time how long it takes for them to complete the survey; if it's more than a couple of minutes, it's too long. Split it into several studies.

Choosing Respondents

Once you're sure the study asks the right questions in the right way, it's time to find people to complete it. You can either recruit respondents or intercept visitors.

Recruitment

When you recruit respondents, you send a message out to people asking them for feedback, either through an email campaign or a paid research firm.

Let's look at how Beatport.com, an online music store, recruits survey respondents. The first step is to send a message like the one in [Figure 7-25](#) to known users. In this particular case, there's no mention of a reward. The message is simple, text-based, and provides opt-out information.

On clicking the link, the respondent goes to a hosted survey like the one shown in [Figure 7-26](#).

Once the survey is completed, the respondent is sent to the page containing free downloads (shown in [Figure 7-27](#)). The surveyor didn't mention this in the invitation, so it's unlikely that it helped improve return rate. Nevertheless, by rewarding known respondents with free content, the company is building brand loyalty with its customers and increasing the chances that respondents will complete future surveys.

beatport digital download @ network

1. Which of the following best describes you?

- ☐ Electronic Music Enthusiast
- ☐ Part-Time DJ
- ☐ Bedroom DJ
- ☐ Full-Time DJ
- ☐ Producer / Remixer

2. How often do you visit Beatport.com?

- ☐ 0 - 1 visits per month
- ☒ 1 - 2 visits per month
- ☐ 3 - 4 visits per month
- ☐ 5+ visits per month

3. How many DJ mixes do you download online in a month (on average)?

- ☐ None
- ☐ 1 - 3 mixes per month
- ☐ 3 - 5 mixes per month

Figure 7-26. A hosted web survey on [Beatport.com](https://beatport.com)

What's notable about this reward is that it's embedded in the shopping cart, as shown in [Figure 7-28](#), so the survey may actually prompt visitors to browse for additional content and make more purchases. In effect, this survey can be used as a strategy to invite back enrolled users who haven't visited the site in a while. The company has also built viral features into the landing page, encouraging the spread of content as a result of survey response.

In this example, the application lets visitors send recommendations to their friends. This is recruitment that ultimately turns into an e-commerce opportunity and viral distribution. It's a near perfect example of Dave McClure's Pirate Metrics: acquisition, activation, retention, referral, and revenue, wrapped in a VOC study.

The Beatport example benefits from a known mailing list of existing users. You probably won't have it this good. In many cases, you'll be using a third-party list and you may have to pay for a panel of respondents.



Figure 7-27. A free download page shown to survey respondents on *Beatport.com*



Figure 7-28. The Beatport reward is integrated into the shopping cart, making it not only a survey, but also a sales opportunity

Both mail campaigns and paid panels have limitations, however.

If you try to *recruit respondents through email*, you'll need to buy a mailing list that's segmented to your target audience (teachers in Florida, for example), and you can expect most of your mails to bounce. A 2003 study (www.supersurvey.com/papers/supersurvey_white_paper_response_rates.pdf) showed a 13.5 percent response rate for online survey invitations, with higher response for smaller, more targeted mailings. The good news is that half of the responses in the study came in within 17 hours of sending out the invite, so you'll get your answers quickly. If you're emailing your enrolled customers, you'll have a much better response rate, but you won't be able to study new visitors who haven't yet signed up

On the other hand, if you're using a *paid research panel service*, you'll get all the responses you can pay for, but you may find that the respondents—who are drawn from the service's paid panelists—aren't as good a fit for your target audience. For example, you may have to settle for teachers nationwide rather than just those in Florida.

Either way, recruitment gets you new answers relatively quickly. If you use a third-party mailing list, the people who answer your questions won't necessarily be your customers. To capture the real voice of your customers, you need to intercept them as they use your site.

Interception

When you intercept respondents, you ask them to participate in the survey either by interrupting them or by building questions into the transaction itself. While interception often happens when visitors first arrive, you can intercept them anywhere—after a checkout, for example, or when they've taken a particular action.

You intercept in several ways:

- Through an *invitation to participate*, such as the one shown in [Figure 7-29](#), which, if accepted, results in a new browser window containing a survey. When the visitor has ended his visit, he can complete the survey.
- By collecting data on a *form built into the site itself*. This model is common on blogs and other content sites with a sidebar format suitable for asking a small number of questions.
- Through *additional questions during a checkout process*. While this might seem natural and noninvasive, it may impact the conversion rate on the site, so you must use it judiciously.

Self-selection and feedback buttons

Feedback buttons ([Figure 7-30](#)) are another way to intercept users by self-selection, but they won't generate a statistically representative cross-section of visitors. This means you're more likely to hear from users who are delighted or disgruntled.

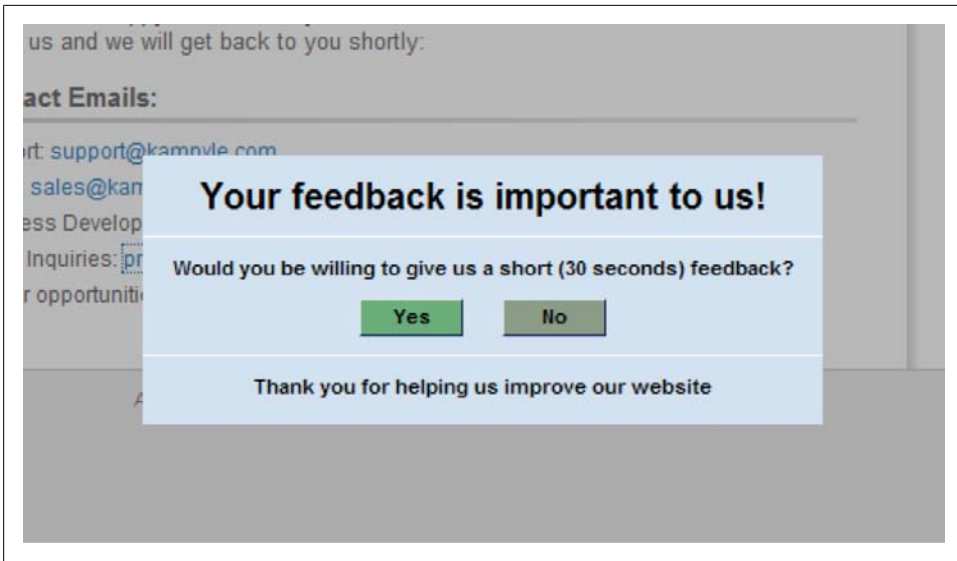


Figure 7-29. A simple interception from Kampyle generated by the JavaScript in [Figure 7-24](#)

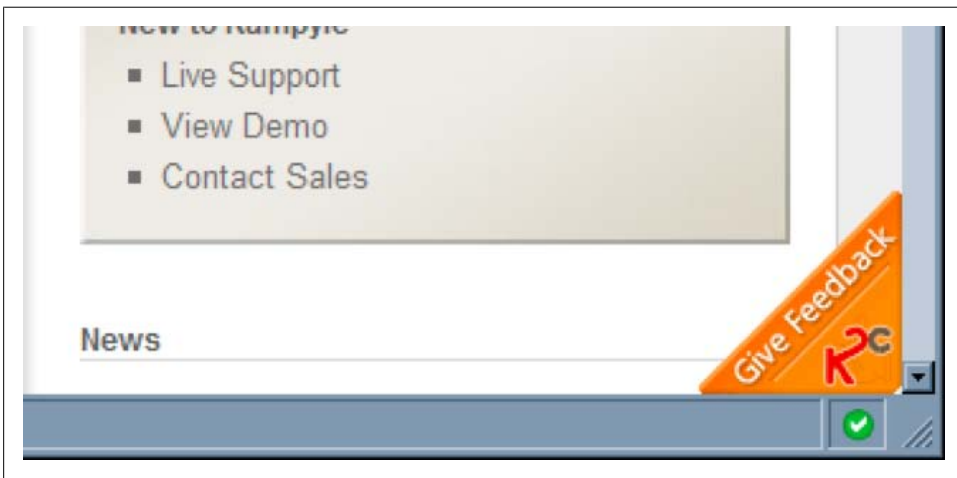


Figure 7-30. A feedback button on a site running Kampyle's VOC service

You should provide visitors with the ability to leave feedback, but not at the expense of inviting them to share their impressions with you, so don't just rely on feedback buttons.

When capturing feedback, anecdotal evidence suggests that simple visual ratings systems, such as the one in [Figure 7-31](#), produce better responses with a greater completion rate than numerical data, at least online.

Figure 7-31. A simple feedback form

An overview of VOC methods

Before we continue, let's look at the various methods of capturing customer responses that we've seen so far summarized in [Table 7-1](#).

Table 7-1. Various methods of capturing customer responses, expected response rates, and usefulness

	How it works	Suitable for	Example	Response rate	Correlation to no. of visitors
Interception					
Invitation to participate	Ask visitors if, once they're done with their visits, they're willing to answer a survey	Understanding visitors in depth	Demographic survey	5–15 percent	High (as long as respondent bias is controlled)
Inline form	Ask questions on the site itself	Surveying all visitors with a vote or similar question	Ask whether visitors want to see more content of this sort; Great for page-level feedback	1–2 percent (few visitors will see the survey or respond, unless it has community and ranking features associated with it)	High (respondents are real visitors), but not random, which affects generalization
Questions in checkout	Ask questions as part of a transaction	Asking specific questions to a subset of visitors who com-	Satisfaction with a check-out process	25–50 percent (higher if included in transaction process, but may affect conversion rates)	High (respondents completed a task tied to an outcome before answering)

	How it works	Suitable for complete a particular action	Example	Response rate	Correlation to no. of visitors
Recruitment					
Mass mailing to target market	Send invitations to a mailing list that matches target demographics	Getting a broader understanding of a market that doesn't currently visit your site	Market research prior to launch	2–10 percent (impersonal messages and spam blocking lead to poor response rate)	Low (unless mailing list is highly targeted)
Mailout to enrolled visitors	Send survey invitation to enrolled customers	Getting a large number of responses from loyal visitors in a short time frame	Community feedback and testing on a new release	5–20 percent (personalized messages and an engaged audience yield better response rates)	High (80 percent of respondents complete the survey)
Paid panel	Pay panelists who match demographics to respond, sometimes with a capture of their visits	Detailed VOC and WIA from predictable, controlled audience	Understanding customer mindset during abandonment	100 percent (paid to complete the task and provide feedback)	Medium (depends on whether the research panel represents your target demographic)

Deciding Who to Ask

How many people do you want to survey? The simple answer is, of course, as many as possible. One commonly cited reason for surveying many people is to ensure that data is statistically significant—the more respondents, the more confidence you have in your results.

Remember, however, that your survey is already biased based on the people who responded to it. Much of what you collect won't be applicable to your site's visitors as a whole, anyway. You still need a large sample, but not because it will accurately model your entire market. The real reasons for wanting many responses are twofold: to validate patterns, and to segment.

You need to know which responses aren't complete outliers, and for this, you need dozens, even hundreds, of answers. Many of the clustering and visualization tools on the market require a large number of inputs to function properly; if you only have a few responses, you may as well read responses by hand.

The more important reason for a large sample size is segmentation. Once you get the results of the original survey, you'll probably have other questions. Imagine that you're

looking at visitor satisfaction with the site after a change. You notice that it has improved significantly overall, but there’s a large range in responses.

Should you be content with that data? Of course not. You should wonder whether there’s a hidden pattern to your responses—did men prefer the change, but not women? Did it work better for younger visitors, but not older ones? If you have a large enough sample of responses, you can segment the results in ways you didn’t foresee when you created the study.

We’ll look at analysis later in this chapter. For now, know that more results are better.

On the other hand, you have a limited number of visitors, and you don’t want to distract all of them with a questionnaire. This is the dilemma of VOC: how do you strike a balance between being receptive to feedback and not annoying your audience?

You must spread out your surveys with the use of a daily quota. The quota dictates how many surveys you’ll invite visitors to each day, up to your target number of surveys. It’s based on the estimated volume of visitors and the response rate to invitations.

Imagine, for example, that you want 20 responses a day and your site has 1,000 unique visitors a day. You also know that only 10 percent of visitors that you invite actually agree to take the survey. You therefore need to invite every fifth visitor to participate in the survey, as shown in [Table 7-2](#).

Table 7-2. Estimating invite interval for an intercepted VOC survey

Estimated visitors	Response rate	Daily quota	Invite interval
1,000	10%	20	5

Some VOC services have sophisticated algorithms for managing quotas based on fluctuating traffic levels and varying response rates, deciding on the fly whether to intercept a visitor. Others set a daily invite interval and stick to it, leaving you to guess at traffic and conversion as best you can. And the simplest of systems store a percentage in the JavaScript for invitations, hoping that you’ll get enough responses.

Private Panels

If you’re using a recruited paid panel, your respondents may install software that will augment their responses, for example, by asking them questions as they surf the site. Some hosted services have access to panels of users willing to participate in research. This allows you to preselect respondents and target a particular demographic (such as males between 25 and 30 in the U.S.), but doesn’t tell you what your actual visitors’ motivations are. As a result, private panels are more useful for usability and navigation testing than for understanding actual visitor mindsets.

Disqualifying Certain Visitor Types

While each of your visitors has voice, you may not want to hear all of them. Should you be interested in the mindset of a particular segment, you'll need to qualify who gets a survey, based on a particular demographic (age, gender, and so on), a respondent's personal background (past use of this or other sites), or surfographic data (ownership of a particular product, comfort using the Web).

When possible, disqualify respondents based on technical information within the page rather than through questions. For example, if you only want to survey your "Gold" customers, put a cookie into the web session flagging those visitors as Gold status and modify the JavaScript that launches the invite so that it invites only Gold customers to take the survey.

Encouraging Participation

When you're running a VOC study, you will be interested in three things:

The response rate

How many visitors receive an invitation (either recruited by email or intercepted by pop up) and accept it, arriving at the survey.

The start rate

How many visitors, once presented with the survey, start it. Some visitors will forget they agreed to participate in the survey and close it, while others may change their minds upon learning more about it.

The completion rate

How many visitors who, having started the survey, finish it.

Your goal, of course, is to maximize all three of these.

Getting Great Response Rates

One of the biggest challenges in web surveys is soliciting participation from the right respondents. To begin with, invitations to participate in a web survey get fewer responses than other forms of survey. In 2007, Lozar Manfreda et al. conducted a meta-study that looked across 45 separate studies. Their paper, titled "Web Surveys versus Other Survey Modes – A Meta-Analysis Comparing Response Rates" (*International Journal of Market Research* 50, no. 1; 79–104), showed that, on average, web-based surveys got an 11 percent lower response rate than other survey modes such as phone or email.

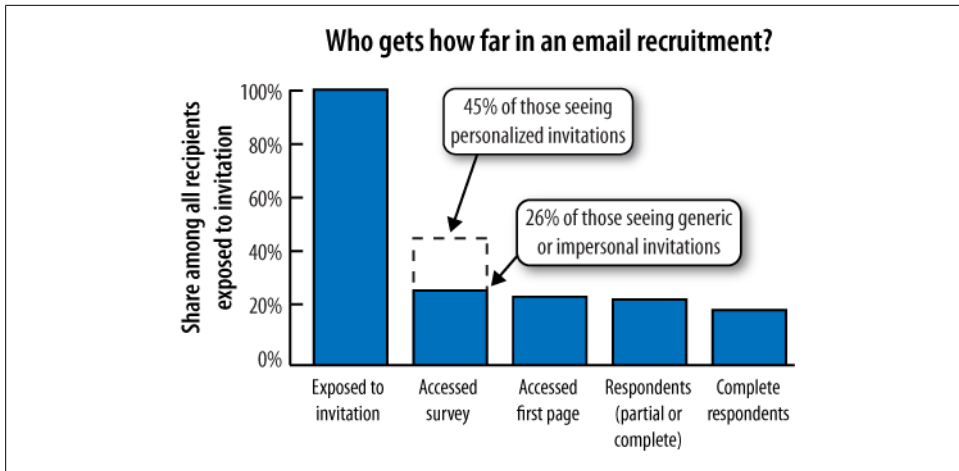


Figure 7-32. Percent of visitors who responded to and completed surveys

A higher response rate means that your survey results are more representative of your visitors in general. It also means fewer interrupted visitors (since you don't have to ask as many in order to get the number of responses you want). So, you should strive for the best possible response rate. Unfortunately, that's not always possible. An earlier study by the same group indicated that 74 percent of people exposed to general invitations and 55 percent of people who received individual invitations never accessed the survey.

Once visitors responded to the invitation, however, 83 percent started to answer the survey and 80 percent completed it, as shown in Figure 7-32 (http://www.icis.dk/ICIS_papers/C2_4_3.pdf). Our discussions with several VOC tool providers confirmed that most studies see similar response rates.

If you're inviting visitors to participate, you need to make the invitation appealing and give them a reason to devote some time to the effort. Simply being polite works wonders. Smart VOC surveyors also personalize their email messages, state the purpose of the survey up front, send reminder email messages, and ensure that formats and design are simple.

A lightbox approach that overlays the offer on the web page, like the one shown in Figure 7-33, can be particularly good at focusing the visitor's attention. It's also an opportunity to give a brief, clear message about your organization that may help reinforce your brand.

Depending on your target audience, a more impactful and eye-catching approach, such as the one shown in Figure 7-34, may work better. It is your responsibility to test and see which method works best for your audience.

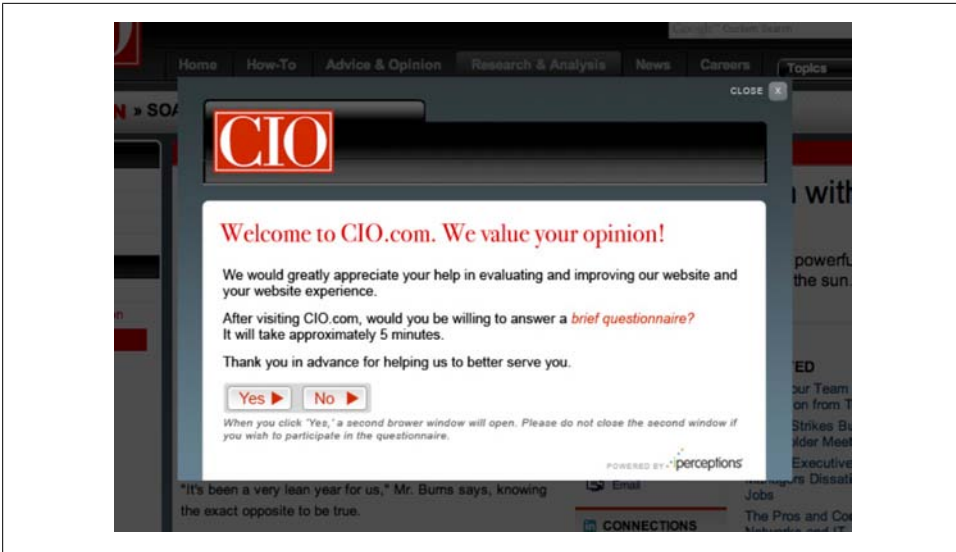


Figure 7-33. A lightbox approach is noticeable and forces visitors to respond, rather than simply letting them close a pop up or new window



Figure 7-34. Invitations should be targeted to audience and brand tone whenever possible

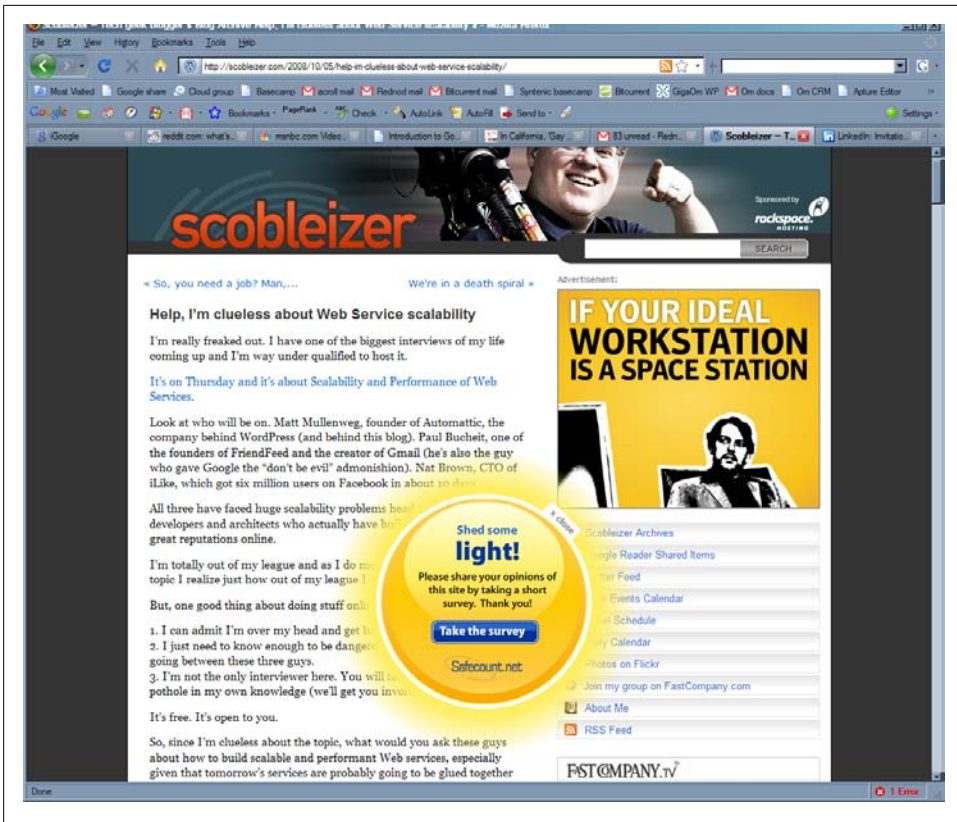


Figure 7-35. The use of an overlay is an elegant method to encourage users to begin surveys, as it still allows users to read a portion of the site

As Figure 7-35 shows, another advantage of overlaid invitations is that visitors can see some of the site behind the invitation at the same time, so they associate the survey in front with the brand and content behind it.

The risks of rewards

Should you reward respondents for participation? The web operators we've spoken with suggest that rewards can increase response rates by 15 to 20 percent, particularly for consumer surveys.

In business-to-business surveys, rewards that are perceived as bribes may have a negative effect. One popular way to avoid this perception is to offer to share the survey's results with respondents, who may have an interest in some of the outcomes.

Rewards may increase the total number of respondents, but may also reduce the number of responses that fall within your desired respondent demographic. So, if you're going to reward participation, be sure you ask control questions that disqualify

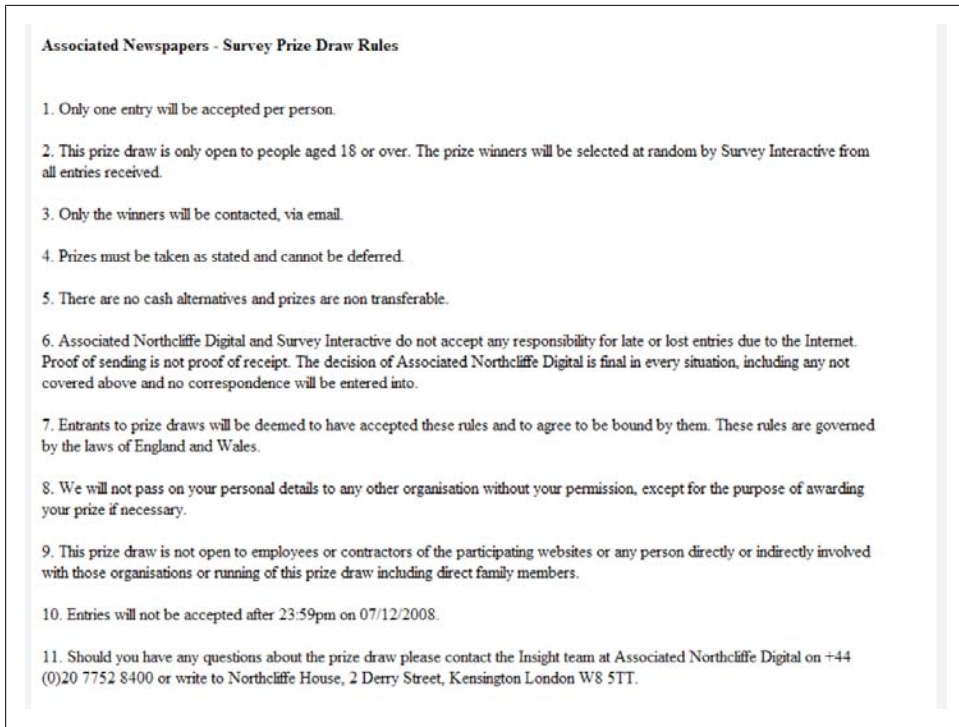


Figure 7-36. Clearly stating the terms of any reward is essential

responses from respondents who aren't part of your target audience and are just on your site to win a prize.

The type of reward you offer may vary depending on survey length, too. A 2004 study on response rate and response quality found that “vouchers seem to be the most effective incentive in long questionnaires, while lotteries are more efficient in short surveys. A follow-up study revealed that lotteries with small prizes but a higher chance of winning, are most effective in increasing the response rate.”*

If you're going to offer rewards, it's important to state the rules and regulations as part of the survey conclusion, as shown in [Figure 7-36](#).

In particular, you may have to comply with state regulations on prizes and contests, and should tell respondents that you will only contact them in the event that they win.

* Deutskens, E.; de Ruyter, K.; Wetzels, M.; Oosterveld, P.; “Response Rate and Response Quality of Internet-Based Surveys: An Experimental Study”, *Marketing Letters* 15, no. 1 (February 2004): 21–36(16).

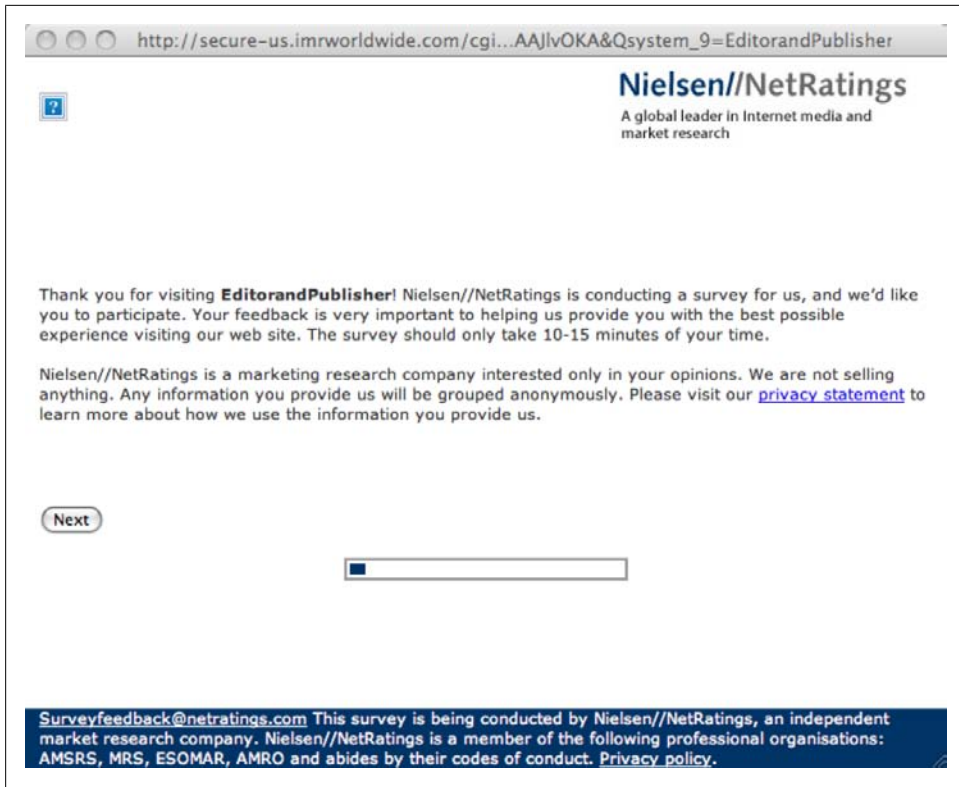


Figure 7-37. A progress bar is an important part of properly setting respondent expectations

Setting Expectations

It's vital that you tell respondents what to expect early in the process. This includes the purpose of the survey, the way in which data will be used or shared, and what steps you're taking to protect respondents' privacy. It should also include the estimated time to complete the survey and clear details on how to contact the operators of the survey, as shown in [Figure 7-37](#). VOC vendor iPerceptions noted that when it first added a progress bar to surveys, there was a significant increase in completion rate.

Permission to Follow Up

You should always ask whether you can follow up with a respondent, using a question like the one in [Figure 7-38](#), either because you may need further clarification on responses or because you may want to include the respondent in subsequent surveys that rank improvement on the site.

A secondary KPI for your site might be the percentage of VOC respondents who agree to a follow-up and become part of your recruited panel.

With your permission, we'd like the opportunity to contact you in the future for research about the media you use and other related topics. You will also have the chance to win some great prizes every time you participate in one of our surveys. Would you be happy for us to contact you again for research purposes?

(We will not use your details for anything else and will NOT pass them on to any other organisation)

☐ Yes, I am happy to be contacted for future research
☒ No, please do not contact me in future

Thank you for your participation in this survey. Please enter your email address below to be entered into our prize draw (your email address will not be used for any other purpose)

Email:

Figure 7-38. An example of a follow-up request at the end of a survey

Improving Your Results

If you aren't getting the results you want from your VOC research, you need to tune your approach. Doing so requires many of the techniques we discussed when looking at web analytics. In many ways, the VOC conversion funnel should be treated as a transaction like any other on your site, and you should monitor and optimize it to ensure you get good information. Here are some problems you may encounter, and suggestions for addressing them.

High recruitment bounce rates

If your email invitations to respondents are bouncing, you need to make sure your messages don't look like spam. Using plain-text email messages (instead of image-heavy, multiple-object messages) works well. Similarly, make sure the message is very simple and short, with only a single URL. Try to make the title of the message direct, and address it to the individual, but don't use words like "survey" or "invitation" in the title—and use them only sparingly in the body of the message.

Low recruitment response rates

Invitation recipients are 19 percent more likely to respond to a personal, targeted message aimed at them individually than to a generic one. If you're targeting your message and still not getting answers, you can consider a reward or try to explain more about why taking the survey will help the recipient somehow. Appeal to recipients' altruism—making the Web a better place—and explain why they, in particular, have been selected.

Poor interception response rates

You're asking people to respond when they visit your site, but they're not taking you up on the offer. You need to optimize your invitation—experiment with several messages and compare the results. Change the point at which the invitation is shown, the segments you target, or the rewards that you're offering. If all else fails, either recruit

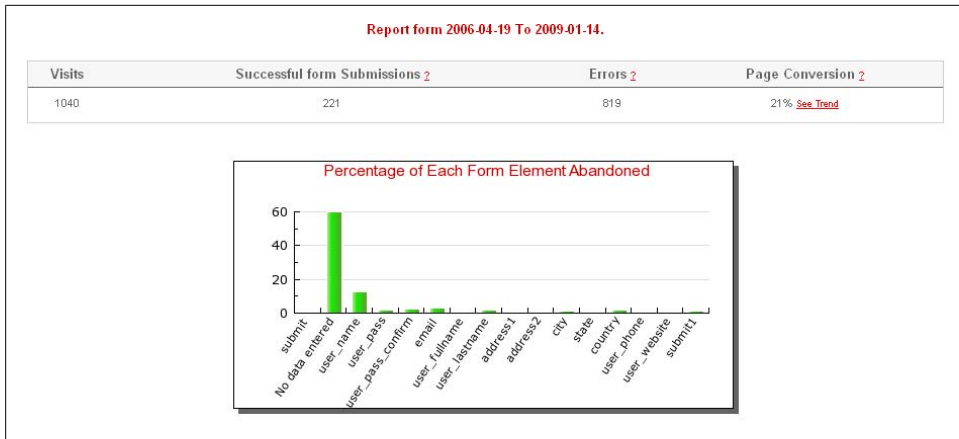


Figure 7-39. Using FormAlive form analysis to identify bottlenecks and troubleshoot survey completion issues

respondents or resort to placing questions within the checkout process—just be sure not to hurt conversions.

Poor start rates

If people are accepting your offer to participate in the survey, but are not starting the survey, you may want to begin it immediately rather than suggesting that they first finish their visit to the site. You may also be able to use JavaScript to detect when the page is closed and bring the survey window to the front, asking visitors if they wish to close the browser or navigate away from the page without completing the survey.

Poor completion rates

If users are starting the survey but not finishing it, make it shorter. Long surveys are the main cause of abandonment, and incomplete responses can't be properly correlated with one another.

Some of the WIA tools we saw in the previous chapter can analyze form completion rates, since they see keystrokes and mouse movements within a page of a form to determine where users are spending the most time, which forms they're refilling, and which fields they are leaving blank.

This kind of analysis, shown in [Figure 7-39](#), suggests where problems occurred or where the visitor gave up. You're less likely to be able to integrate WIA monitoring from one vendor with a VOC survey from another, however, so this may only apply to forms you're operating yourself.

Large number of disqualified responses

If you're getting completed surveys, but the results aren't useful, there may be one of several problems:

You're not asking the right people

Demographic data from the survey suggests that you're hearing from visitors that aren't your intended audience. Because respondents don't match the group you're hoping to analyze, you need to disqualify earlier in the process. If you're recruiting participants through email, you need to change your mailing list or ask qualifying questions in the email itself. If you're using a paid panel, you need to urge the vendor to adjust the makeup of its panel. If you're providing a reward, try removing it and see if this leads to better, albeit fewer, results.

You're not asking the right questions

If you're not getting a picture of what customers are saying, you may be constraining their responses too much. It's okay to have a hypothesis and test it, but make sure there is room for some open-ended answers (for example, a respondent may write, "Your colors are too bright"). Then analyze the open-ended responses for patterns ("10% of respondents say colors are too bright"), and consider turning them into a more structured question ("Our colors are too bright. Agree/disagree") in future surveys.

The users don't understand the questions

If you're getting inconsistent responses, some of the respondents may simply not understand what's being asked of them. See if there's a pattern of misunderstanding ("More men under 30 answer question five incorrectly") and retest the questionnaire with that segment to find out where the misunderstanding lies. Often, identifying misunderstandings or confusing terminology can improve your organization's marketing communications as a whole. If, in the process of optimizing your VOC studies, you identify jargon or words that your market doesn't understand, be sure to tell the marketing department!

Once you've got data you can use, it's time to analyze it.

Analyzing the Data

Once you've collected enough responses, you can start analyzing the data. When respondents can only pick one answer from a selection—usually communicated through a radio button or a drop-down list—you simply count the number of responses. This can be tricky, however, as simple answers can often hide more complicated patterns. In other words, distributions can often be more valuable than aggregations. Thankfully, much of the heavy lifting can be done for you by using the algorithms provided by existing VOC vendors.

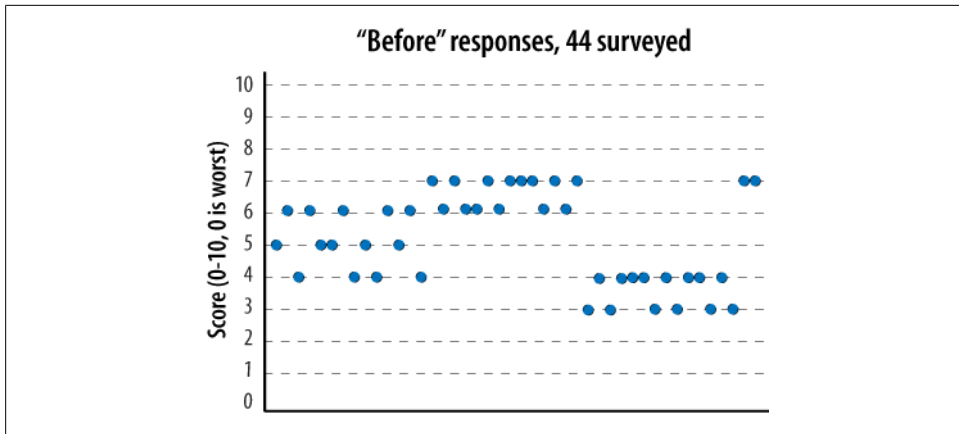


Figure 7-40. Individual scores from 44 respondents prior to a site change

The importance of segmentation and representation

It's critical to consider your results in the context of segments of visitors that responded to your survey. Let's look at a hypothetical example of how segmentation can show very different results.

A media site wanted to improve the excitement generated by its visual content. Knowing that results are only useful if compared to something, it first surveyed visitors before making the change to its site. It intercepted 44 respondents, asking them for their impressions of the website on a scale of 1 to 10, where 1 was “bad” and 10 was “good.” The results are shown in [Figure 7-40](#).

The organization then changed the site, adding glamorous visuals and more movement and multimedia. Again, it collected 44 responses from visitors rating the site. These results are shown in [Figure 7-42](#) (shown later).

At first glance, the results were encouraging. The rating climbed from an average of 5.15 to an average of 6.31—an 11.6 percent improvement. The web operator had also decided to ask two segmentation questions: respondent age and gender. When segmented along these dimensions, the results were very different.

As [Figure 7-41](#) shows, while the site changes had improved the rating given by younger visitors, it had been less effective for older visitors.

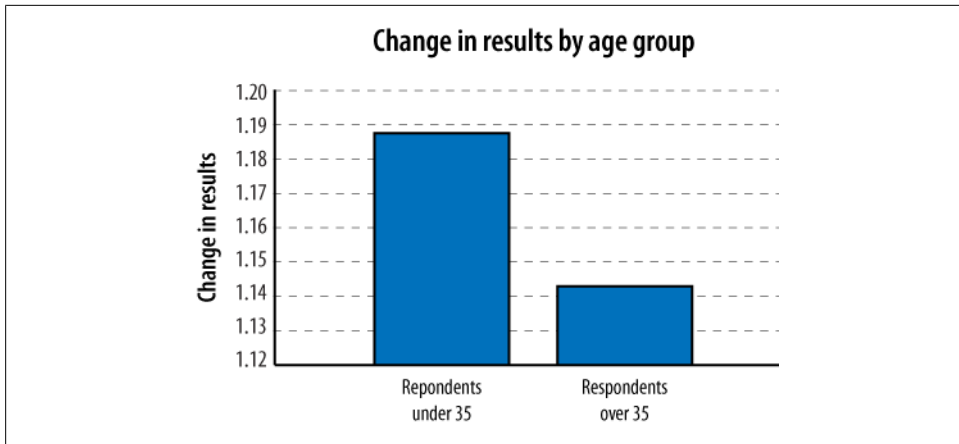


Figure 7-41. Change in site rating segmented by age group

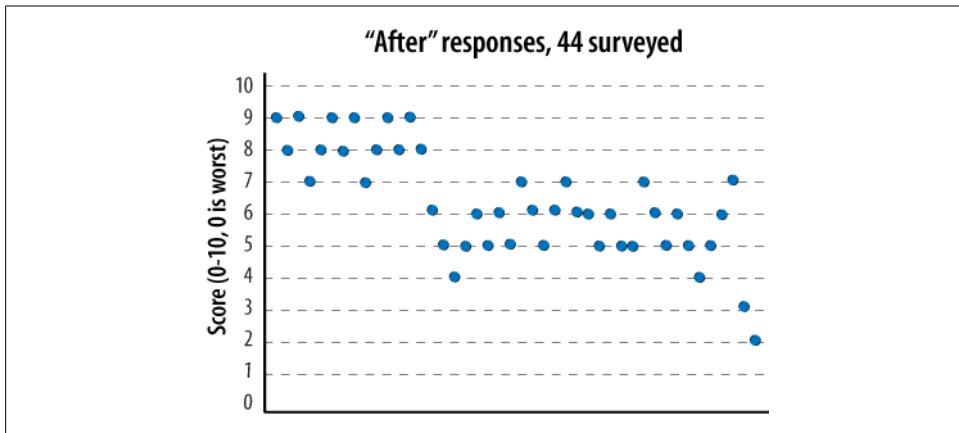


Figure 7-42. Individual scores from 44 respondents after a site change

Perhaps most importantly, the results showed that while the changes improved men's ratings of the site, they had actually lowered ratings from female visitors, as shown in [Figure 7-43](#).

On closer analysis of the data, the company determined that the respondents had not been evenly represented across gender and age. 57 percent of respondents were female and 64 percent were under 35.

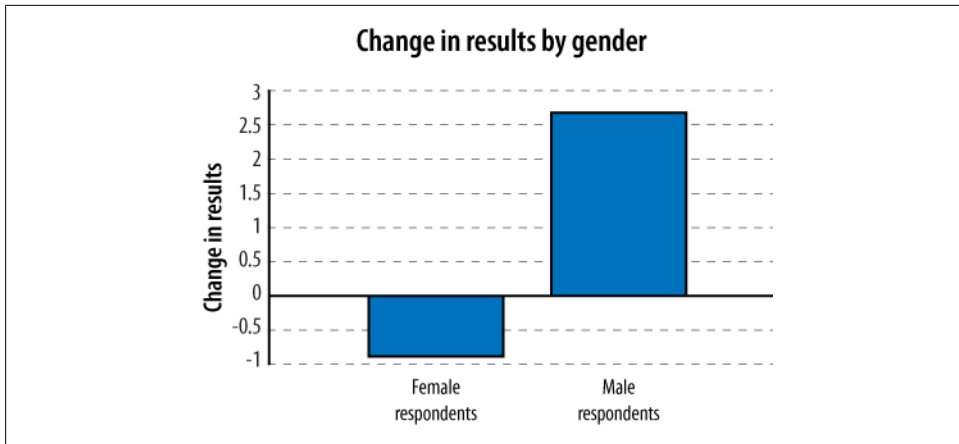


Figure 7-43. Change in site rating segmented by gender

This is a fairly straightforward example, but it should show you the importance of data exploration and segmentation. If the site sought the approval of young males, the change might have been a success, but if it was targeting older women, the change was a disaster, as summarized in [Figure 7-44](#).

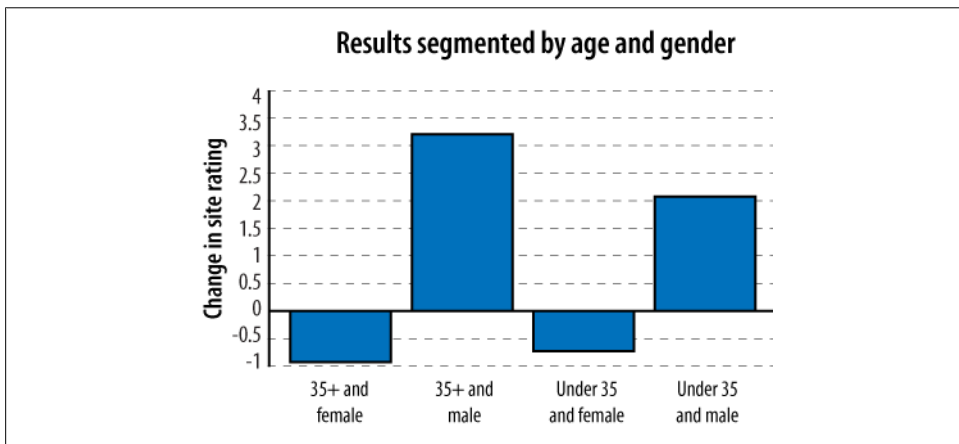


Figure 7-44. Relative change in site rating for four segments of respondents

While a full discussion of statistical analysis is beyond the scope of this book—and most commercial packages offer tools to help with this—here are some things to bear in mind.

Analyzing integer data

The easiest data to analyze is whatever you’ve collected numerically. This may be a value you’ve asked visitors to give you (“How many other social networks do you

belong to?”) or rating data (“On a scale of 1 to 5, where 1 is dismal and 5 is awesome, how good is this site?”).

Every time you analyze numbers you need to calculate some basic statistics (Table 7-3).

Table 7-3. Some basic statistical terms

Measurement	What it means	How it's calculated	Concerns and uses
Mean (or average)	The average of all responses	Add the answers and divide by the responses	Averages can be misleading—a few outliers can strongly influence them, so it's common to trim off the highest and lowest values to get a better sense of an average
Median (50th percentile)	The number that “splits” all the responses in half	Sort the responses and find the halfway point	Better for finding middle ground than an average when there are large outliers
Mode (most common)	The response that happens the most	Count how many times each value or category is seen	Helps you understand what's most common in responses; unlike means and medians, modes apply to categorical data, for example, “the most common name in the survey is Smith”
Standard deviation (dispersal)	How dispersed the answers are	Add up how far each response is from the mean, square the results, find the mean of that square, and take the root of it	If all respondents provided the same answer, there would be no deviation; if answers varied considerably, standard deviation would be high; standard deviation is a measure of uncertainty

Wikipedia maintains a comprehensive discussion of statistics and provides more detailed information on some of these terms at <http://en.wikipedia.org/wiki/Portal:Statistics>. Figure 7-45 shows how the four statistical metrics describe the distribution of the 44 responses we looked at earlier.

Most commercial software will calculate means and standard deviations, as well as segmenting across various categories of data you’ve collected. Figure 7-46 shows an example of this.

In addition to aggregate analysis of visitors’ responses, most tools will let you view an individual response as well (as shown in Figure 7-47). As we’ve seen, looking at the individual responses and understanding their distribution can be far more revealing than just looking at averages.

It’s important to be able to move from aggregate trends—overall customer satisfaction, main reasons for complaints, top motivations, and so on—to individual responses. This way, you can understand patterns while still gleaning the open-ended insights for which VOC is so important.

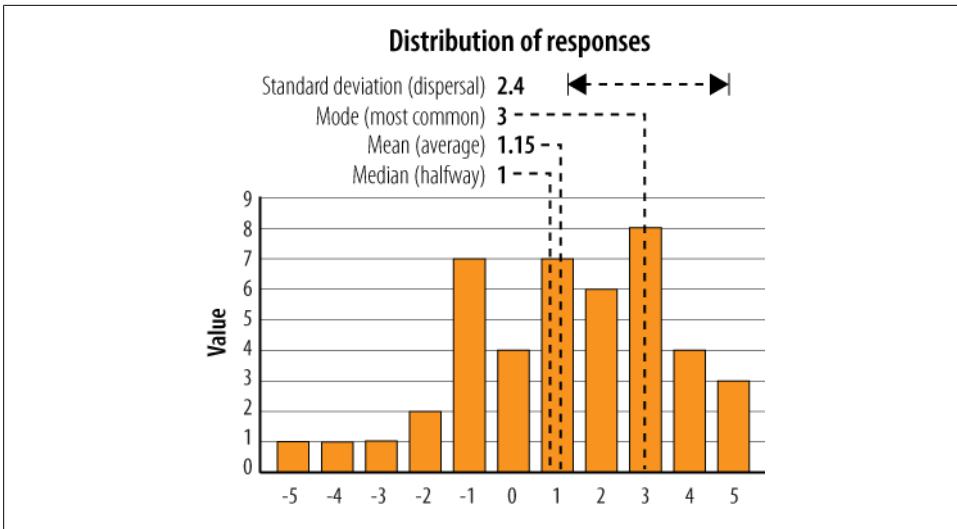


Figure 7-45. How various statistical terms describe a data distribution

Displaying numerical breakdowns

To visualize multiple-choice data, you can simply show scores for each answer or a “top five” list. Figure 7-48 shows more complex data—in this case, a comparison of two brands’ rankings along with a statistical description of the results.

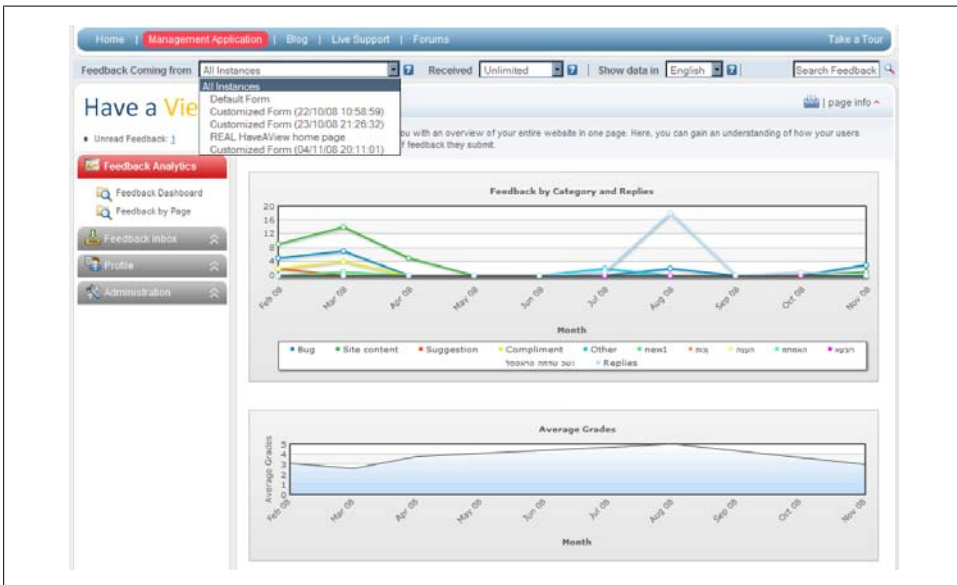


Figure 7-46. Statistics on visitor grading of websites within Kampyle shows averages over time

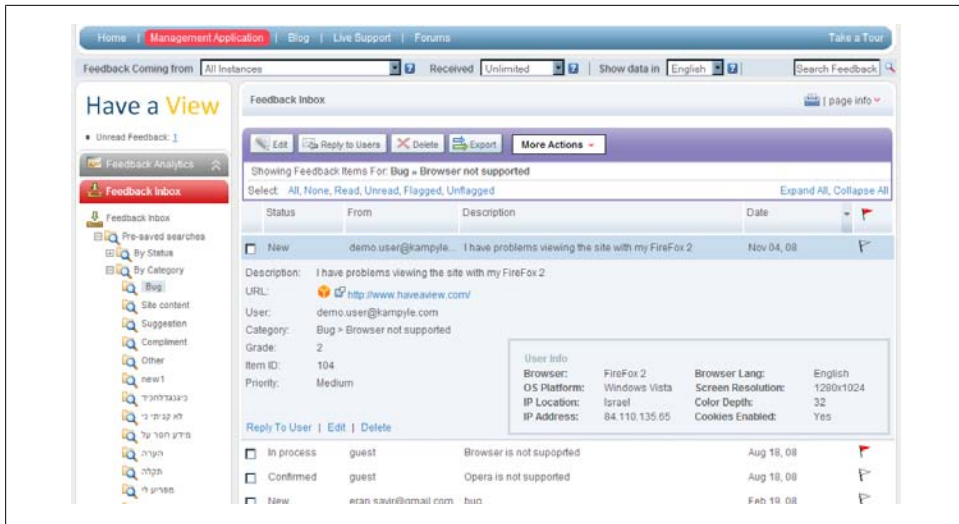


Figure 7-47. A view of individual responses that make up an average grade

Ordinal data

If you ask respondents for a list of responses in order, you're collecting ordinal data. For example, you might say, "List your five favorite ice cream flavors, with the most favorite first."

While this data is useful, you may want to weight it to ensure the best visualization. You may give a weight of 5 to the first answer, 4 to the second, and so on. The result is a weighted scoring of preference that you can add up across respondents.

Displaying many possible answers can be challenging. New visualizations such as the tag cloud shown in Figure 7-49 can help you analyze data for patterns and trends that might not be as obvious.

Open-ended data

If you're asking users to submit open-ended data and you have relatively few responses, you owe it to yourself to read them individually. If you have large numbers of open-ended responses, you may want to analyze only those whose quantitative responses are unusual, for example, people who had an extremely unsatisfying experience or those who could not complete a task.

Some VOC services offer parsing tools that will look at important words (nouns and verbs) and analyze them, presenting them as ordinal data based on how often they occur, or in tag clouds. Advances in natural language parsing and semantic interpretation promise to make it even easier to extract sentiment and meaning from a large number of responses.



Figure 7-49. A tag cloud visualizing frequency of responses within unstructured feedback

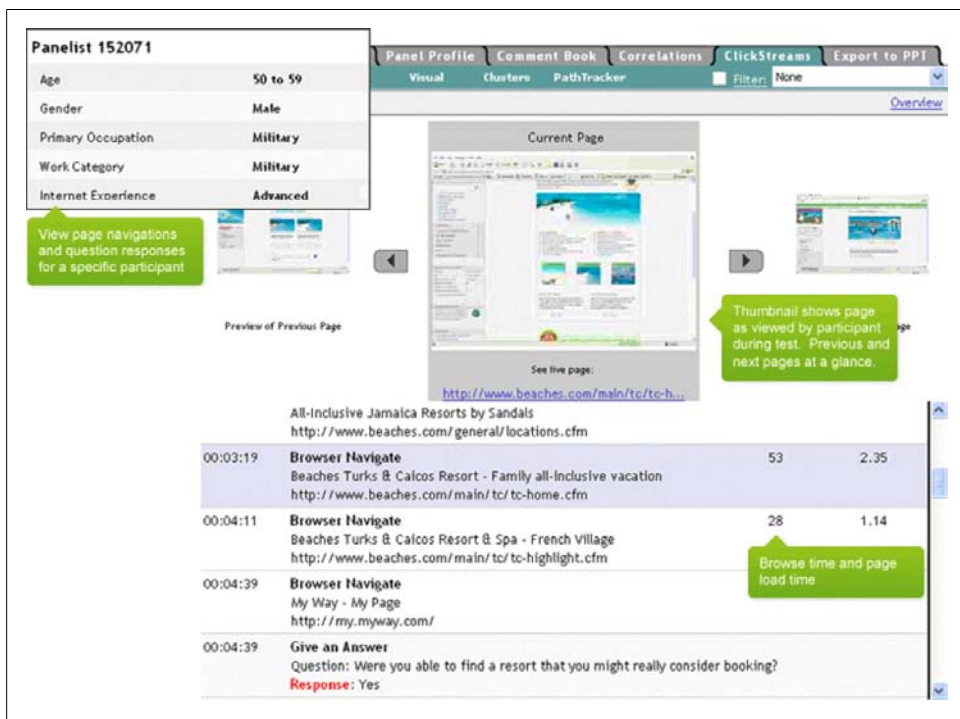


Figure 7-50. Integration of page replay (WIA) and survey responses (VOC) in a single tool

	A	B	C	D	E	F	G	H	I	J	K
	Status	User Email	User Login	Description	Opened	Category	Grade	Item ID	Page URL	Priority	Reply
4	New	-	guest	Wrong information about the browser is not supported	Nov 04, 08	Bug > Site content	4	103	http://www.haveaview.com/	Medium	
5	In process	-	guest	Opera is not supported	Aug 18, 08	Bug > Browser not supported	5	102	http://www.haveaview.com/	Low	
6	Confirmed	-	quest	Bug > Browser not supported	Aug 18, 08	Bug > Browser not supported	5	101	http://www.haveaview.com/	High	
7	Completed	-	quest	other1 missing information about the	Jul 23, 08	Other	-	99	http://www.haveaview.com/	Medium	Thank you
8	Completed	-	quest	Site content > Missing Content	Apr 08, 08	Site content > Missing Content	5	91	http://www.haveaview.com/	Medium	Thank you

Figure 7-51. VOC responses exported to a spreadsheet for further analysis

Advantages, Concerns, and Caveats

VOC is an essential tool for understanding your visitors' mindsets and their reactions to the changes you make. However, it's not a substitute for other forms of tracking and analysis, and it requires rigorous statistical analysis of data distributions to avoid misinterpretation. Results may be biased toward a subset of your visitors rather than reflecting the opinions of all your users.

Learning What to Try Next

If you can harness VOC, you have a real advantage: *you learn what to try next*. Discover a possible improvement, and you know what to measure with analytics, EUEM, and WIA. If you can adopt a mindset of quick iteration that collects and analyzes the voice of your customers, you'll be much more likely to succeed online.

Becoming Less About Understanding, More About Evaluating Effectiveness

VOC is a poor substitute for actually interacting with your customers. As the Web shifts from a one-to-many monologue to a many-to-many conversation, there are less intrusive, less misleading ways to determine what your target audience is after. We'll look at this in Chapters 11 through 14 of this book, when we turn our attention toward online communities.

VOC won't be marginalized, however. It will be disseminated differently—through Twitter threads and Facebook groups. There will be a human element to it, as we invite social contacts to give us more detailed information resulting from a survey.

Community managers will have several predefined surveys running at all times and will guide vocal community members toward them.

You May Have to Ask Redundant Questions

We’ve admonished operators for asking questions that can be answered elsewhere. Doing so is lazy and often less accurate than cross-referencing other data you already have. But we would be remiss if we didn’t recognize that there is a good reason this still happens despite a desire to keep surveys short and completion rates up: *data compartmentalization*.

In some cases, you may be legally prevented from associating VOC data (such as race, gender, or age) with a visitor’s identity (analytics, WIA). If this is the case, you have no choice but to collect data within the VOC system, even if it already exists elsewhere, because you can’t associate the respondent with analytics and EUEM tools without breaking the law. If so, we forgive you for asking visitors things you already know—just try not to do it too much.

Voice of the Customer Maturity Model

Maternity level	Level 1	Level 2	Level 3	Level 4	Level 5
Focus	Technology: Make sure things are alive	Local site: Make sure people on my site do what I want them to	Visitor acquisition: Make sure the Internet sends people to my site	Systematic engagement: Make sure my relationship with my visitors and the Internet continues to grow	Web strategy: Make sure my business is aligned with the Internet age
Who?	Operations	Merchandising manager	Campaign manager/SEO	Product manager	CEO/GM
VOC	“Contact us” buttons and on-site feedback; emphasis on satisfaction	Surveys within the site via opt-in invitations; emphasis on loyalty	Engaging the public Internet (chatrooms, social sites, etc.) and analyzing key topics and discussions; emphasis on word-of-mouth and virality	Customer collaboration in product and service design; user engagement; emphasis on lifetime value creation, giving the user a sense of ownership	Consumer feedback tied in to corporate planning through quantitative analysis of VOC and community data; customer as a collaborator in the growth of the company