CUSTOMER LOYALTY

Are You Hearing Voices?

f you're not already hearing voices, you'd better start! The voices I'm talking about are those of your customers. Organizations that excel in today's economy invest resources to ensure they collect the voice of their customers (VoC) so they can provide products and services that cause wild excitement in the marketplace. We're not just talking about "ho hum" products or services; we're talking about, "Wow! How did they know I can't live without this?"

In 50 Words Or Less

- Any organization that wants to create products and services that wow its customers must really listen to what its customers need.
- A good way to gather the voice of the customer is to conduct a focus group and compile the information into a house of quality.

The VoC defines the direction an organization should be taking. Collecting the VoC should occur throughout the product or service development cycle. It should take place before the final concept is defined, while the product or service is in development and after the product or service has been launched (see Figure 1).

One of the most effective ways to gather VoC is through a customer focus group. I will fill you in on the secrets customer savvy marketing companies charge your organization megabucks to learn. I will also explain how to create just the right questions to ask during the focus group, how to "scrub" subjective customer input and how to determine product or service measures using quality function deployment (QFD) to ensure you're getting your customers excited.

Interested? You should be. It's your turn to create unabashed passion in the marketplace for your products and services.

Assumptions

In a perfect world, a team of six to eight company employees follows the product/service development process from cradle to grave, guided by a facilitator. In my experience, organizations that follow this formula learn the most and realize the best results. Assuming this is a perfect world, my dream team would include two representatives

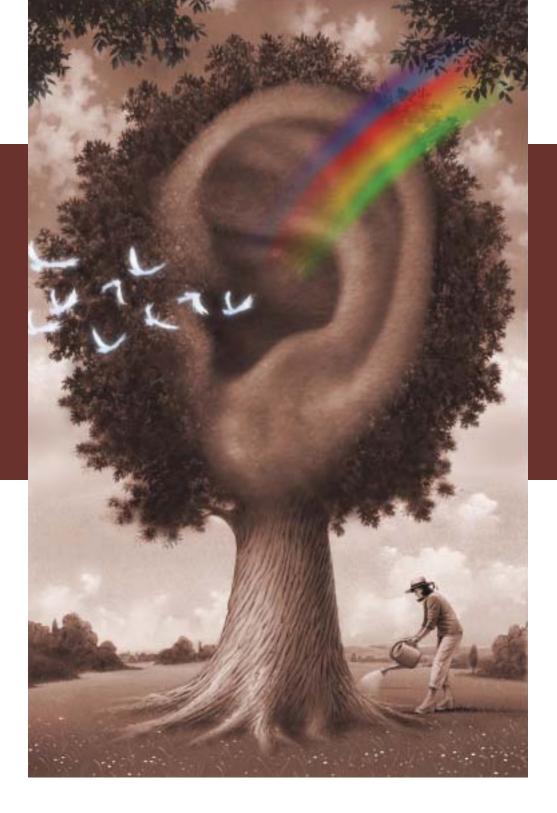
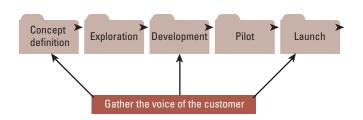


FIGURE 1 New Product/Service Development Model



each from marketing, engineering or R&D, manufacturing and quality control. In a service organization, the team would include members from sales and marketing, customer service, policy deployment and strategic planning.

Creating Questions

Before I talk about the mechanics of gathering customer needs, I need to discuss how to find out exactly what you want to learn from your customers. This involves identifying categories of

questions, writing the questions and then going over them until you're satisfied you're getting all the information you need.

Creating this list of questions will usually take longer than anticipated. One of the best ways to determine what questions to ask is to establish categories the questions fall into. Ask your team to brainstorm silently on sticky notes, writing one- to two-word statements on a category of questions they'd like to learn more about from their customers. Have the team members post the notes on a wall, and then rearrange the sticky notes into meaningful categories.

From the groups of categories, subteams begin the arduous task of creating questions. Members should receive basic training on the best way to structure a focus group question and then go to work on creating a list of 60 to 70 questions. The questions start out broad based ("Describe ... What ...? Tell me ...") and then drill down for specific information (see Figure 2).

Now it's time to whittle the list of 70 questions down to 12 to 15. This can take some time, but it's very doable. Once the team has 15 perfect questions, it's time to role-play the questions using team members and anyone within grabbing distance. After any unclear questions are rewritten, the team is ready for its first focus group.

If the team is having trouble coming up with just the right questions, the list below is a good starting point:

1. In what ways does our product or service perform well?

Categories Of Questions

Broad based general questions 50,000 feet · Describe ... What ... • Tell me ... Specific drill down 10,000 feet questions • How .. · Should ...

- Ground level

- 2. What aspects of the product or service do not perform well?
- 3. What are the best features of our product or service?
- 4. What aspects of our product or service would you strongly recommend we not change?
- 5. When using our product or service, what defects would cause you to place a product into a holding area or scrap it?
- 6. What are the top two to three issues that are important to you?
- 7. In what areas do competitors' products or services perform better than our product or service?
- 8. What aspects of our product or service cause difficulty in processing?
- 9. What situations do you find awkward or difficult when purchasing our product or service?
- 10. Describe an ideal technical support experience and explain how we compare.
- 11. In what areas can we improve the relationship between our company and your organization?
- 12. Given limited resources, which of the competitors' products or services do you prefer and
- 13. If you had a magic wand, what would you change about our product or service and our support?
- 14. Looking into the future, how do you see your needs evolving?

The Focus Group

Focus groups do not have to be complicated, expensive endeavors. The trick is to capture what the customer needs with enough detail to determine how you're going to meet that need. You don't want the customer to give you a product or service design solution. Your organization's engineers, R&D employees and technicians can do that. If you think you're hearing the customer offer solutions, ask, "What will having that do for you?" Document that response.

Actually, document everything the customer says. If the customers will allow you to videotape the focus group without interrupting the flow of information, do it. You don't want to interrupt the flow, but all information is important. Audiotaping is less of an obstruction and can be invaluable when the team encounters questions regarding a discussion or the criteria used for making a decision.

• Is ... • Who ...

When ...

Where ...

It usually takes six to eight weeks for a team to preplan a focus group. The sales employees are primarily responsible for getting your customers to participate. Focus groups should ideally be conducted at the client's location because this affords the team the opportunity to take a tour of the facility and gather even more data, and it provides first-hand information about how the customer uses your product or service. Follow these steps when planning:

- Choose some customers who love you and some who hate you. Customers who are the most critical of your product or service can sometimes give you the best feedback. Contact them by phone and follow up with a contact letter and confidentiality agreement.
- Compile a customer roster, and gather information on each participant's position in the organization and his or her area of expertise.
- Create a customer presentation that explains why you're doing what you're doing, lists the

- focus group questions and clarifies the evaluation criteria you will be using.
- Conduct the focus group session. This is typically done with team members and a professional focus group facilitator. If not all team members can attend, the most technical ones need to be in attendance.

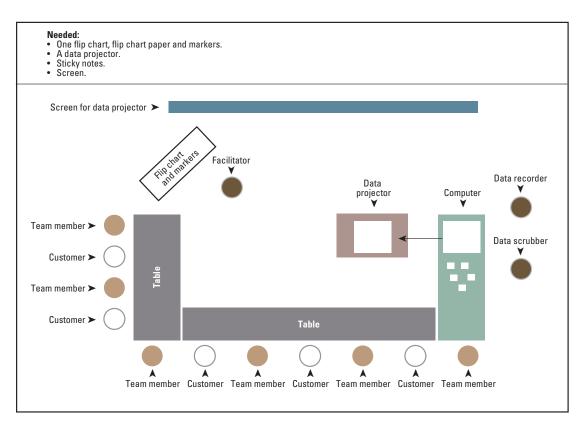
How To Conduct a Focus Group

A typical session, hosting four to eight customers, can take up to four hours. This includes introducing the session, asking the questions, scrubbing the data and then asking the customers to rate their needs and the competition. Customers rate their needs according to:

- How important each need is.
- How well your organization meets the need.
- How well the competition meets the need.

The room setup in Figure 3 is optimized for interaction. The team members sit among the customers to build rapport.

FIGURE 3 Focus Group Room Setup



The focus group facilitator presents the session overview, and the data scrubber asks the questions, drills down to needs (not solutions), analyzes the data and writes each customer need on a sticky note (see sidebar "Scrub Till It's Clean" for more information on data scrubbing). The data scrubber then hands the scrubbed sticky notes to the data recorder, who checks the sticky note data for technical accuracy and enters scrubbed needs into a spreadsheet.

The questioning period can take up to two hours. After all the questions are asked and customer needs documented, the customers take a break or, better yet, go to lunch. This is when the team members look at each customer need, make sure there are no duplicates and determine if any group data express the same need in two or three different ways. This process will take the threeperson team—the facilitator, data scrubber and data recorder—about 45 minutes to complete and load into a spreadsheet.

When the customers come back from their break, the projector is showing a form similar to the one in Figure 4. One at a time, customers rate the importance of each need on a scale of one to five, with one indicating "low importance" and five indicating "critical importance." Then, they rate how well your organization meets the need and how well your competition meets the need. This is also done on a scale of one to five, with one indicating "not so well" and five indicating "great."

Basis for House of Quality FIGURE 5

		How	
	What		
'			

Organizing the Data

Now it's time to scrub the data again and group like needs so you can come up with a final list of 25 to 30 customer needs. To get a final rating on the importance of each need, you may need to resurvey customers or, if you've gathered enough data points, calculate the mode of the rating.

Spreadsheet of Customer Needs and Competitor Ratings

Customer needs (one to five)	On a scale of one to five, rate the importance of each need.	On a scale of one to five, how well do we meet this need?	On a scale of one to five, how well does the competition meet this need?		
	How important is this need?	Our company	Competitor A	Competitor B	Competitor C

If you only conducted one focus group but had a good representation of customers, you have all the numeric data you need. If you don't believe you had a good enough sample, conduct a validation analysis on the customer's needs and ratings. According to Griffin and Houser, you need to talk to only 12 customers to learn 70 to 75% of their needs. To get 80 to 85% of their needs, talk to 20 customers, and to get 90% of their needs, interview 30 customers.1

The House of Quality

The methodology that proves most powerful in analyzing customer needs is QFD. The first matrix in a QFD project begins with the house of quality, into which the data are entered for comparison of the "whats" to the "hows" (see Figure 5). The team moves through each room in the house of quality in a logical manner (see Figure 6, p. 34). The data go into the matrix in the following order:

- The customer needs—the "whats" —and their importance rating are entered into the matrix first.
- 2. The technical descriptors—the "hows"—are entered next.
- 3. Team members' ratings of the strength of the relationship between the "hows" and the "whats" are entered last.

Customer needs and their importance are documented in room one of the house of quality. The importance ratings for the customer's needs are critical because this one number drives the entire prioritization process.

If you're conducting multiple focus groups, you need to do a final rating analysis survey using a format similar to the one in Figure 7 (p. 34). These simple surveys can be faxed, mailed or e-mailed to customers. If your industry allows it, give the customer some sort of remuneration for completing and returning the survey.

The "hows" or technical descriptors are documented in room two. Technical descriptors can have names such as "product/service specifications," "measures," "voice of the engineer" or "quality characteristics." The team must determine a way to measure each customer need and enter that information into room two. For each customer need, the team develops at least one, possibly two or three, technical descriptors.

The team now moves into the relationship matrix, or room three. This is where an analysis of how the technical descriptors positively impact each customer need is recorded. The question to be answered is, "If we control this technical descriptor, will it help meet the customer's need?" If the answer is "yes," the strength of that positive impact is determined and recorded.

Strong relationships are rated a nine, medium relationships a three, weak relationships a one and

Scrub Till It's Clean

Data scrubbing entails taking the customer's verbatim statements and creating one concise need. For example, if the customer says, "I'd really like this product to come in white," he or she is really presenting a design solution. That's a no-no. The data scrubber should then ask, "And what will having it in white do for you?" The customer may reply, "It would make it easier to see in the dark."

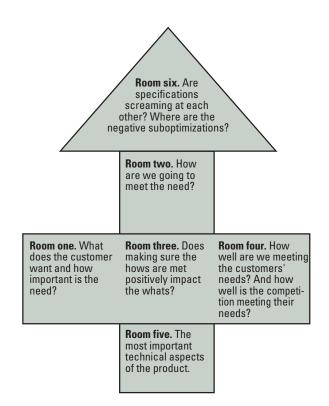
The data scrubber then determines what the customer really wants is for the product to be visible in the dark. The solution to "be visible in the dark" could include myriad design aspects and not necessarily include making the product white.

Data scrubbing would also occur if the customer says, "I'd like for the product to be easy to use." "Easy to use" could mean a lot of different things, and the data scrubber would need to get more specifics on what the customer means by this statement.

The data scrubber should then ask, "And what specifically do you mean by 'easy to use'?" The customer may then list a number of things meant by "easy to use." Perhaps he or she wants the product to turn around a tight corner, be able to be lifted with one hand or have lots of room for personal belongings.

Developing data scrubber ears takes practice and is vital to getting to the real needs of the customer.

Rooms in the House of Quality



no relationship a zero. These values are multiplied by the importance rating for each need, giving cells in the matrix their own value.

Room four holds the customers' opinion of how well your organization and the competition are meeting each need. This general area of the house of quality can hold numerous other rooms giving the marketing department something to crow about or the team something to delve into deeper.

The overall importance rating for each technical descriptor is documented in room five. The importance rating is calculated by summing up cell values in each column. Now the team has a numeric value for each technical descriptor. The higher the number, the more critical it is in meeting the customer's need.

Knowing which technical aspect of the product or service is most important helps expedite the analysis process and gives the team a roadmap for moving into concept selection. After calculating the overall importance rating, the team may decide to look only at how the top third technical descriptors impact each other in the final analysis—the correlation matrix.

The roof or room six is called the correlation matrix. Completing the correlation matrix allows the team to understand which technical descriptors impact each other, either negatively or positively. Negative relationships will cause the most trouble as you design and build the product or service.

You've now completed the process for gathering

FIGURE 7 Rating Analysis Survey

Customer needs for a box of chocolates.	On a scale of one to five, rate the importance of each need.	On a scale of one to five, how well do we meet this need?	On a scale of one to five, how well does the competition meet this need?		
	How important is this need?	Our company	Heart's	Sticky Fingers	Other:
Sweet					
Low calorie					
Heart healthy					

the VoC and putting it into a format that will tell your team which aspects of the product or service are most critical. You should have a good understanding of the marketplace through the eyes of your customer, and that is invaluable information. You should have no question as to what to work on first

Remember, your customer needs, market and competition are constantly changing. Using old customer input to build a new product or service is like using an abacus to do the statistical analysis for a Black Belt project. The final result will contain so much variation and error, the odds of getting a good result are terrible. Instead, create passion for your products and services in the market-place by listening to the voices.

and where to spend your resources.

REFERENCE

1. Abbie Griffin and John Houser, "The Voice of the Customer," *Marketing Science*, Vol. 12, No. 1, Winter 1993.

BIBLIOGRAPHY

Akao, Yoji, and Shigeru Mizuno, *QFD*:

The Customer Driven Approach to Quality

Planning and Deployment, Asian

Productivity Society, 1994.

Burchill, Gary, and Christina Hepner Brodie, *Voices Into Choices: Acting on the Voice of the Customer*, Center for Quality Management, 1997.

Clausing, Don, "The House of Quality," Harvard Business Review, May-June 1988.

Cohen, Lou, Quality Function Deployment: How To Make QFD Work for You, Addison-Wesley, 1995.

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PROFESSIONAL OPPORTUNITIES

Bettis Laboratory Statistician

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