

5. Capture customer needs – The Needs Domain of Information

The final understanding and prioritization of the customer's most important needs and resource concerns and the new product's ability to fulfill them is an iterative process. It requires access to more detailed information from the other information domains of Customers, Functions, Solutions, and Processes. Therefore, you need to revisit the other information domains several times and have a minimum of five loops of interaction with the customers. This iterative approach to filling the Needs Domain with value-critical information increases your chances of creating a WoW product.

This chapter will cover:

- 5.1 What is a customer need or resource concern?
- 5.2 The Kano Model
- 5.3 Three methods to capture customer needs and resource concerns
- 5.4 Voice of the customer - the first and second loop of customer interaction
- 5.5 Looks like a real product - the third loop of customer interaction
- 5.6 Works like a real product - the fourth loop of customer interaction
- 5.7 Sells as a WoW product - the fifth loop of customer interaction
- 5.8 Summary

5.1 What is a customer need or resource concern?

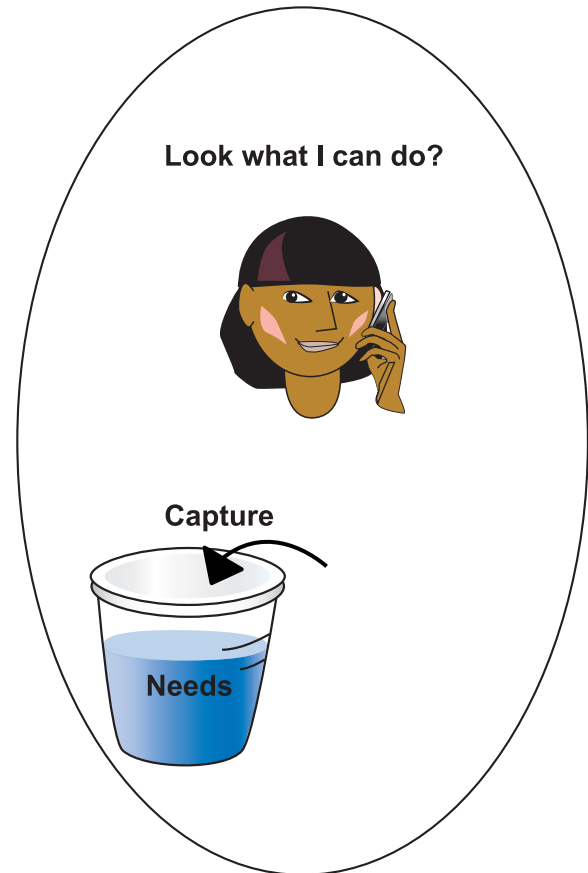
According to the European standard EN 1325-1:

- **"A customer need is what is necessary for or desired by the user."**

The beauty of the standard is that it makes no distinction between needs and wants. The standard treats emotional needs as important as physical needs. Needs are the numerator in the value definition and have the capacity to increase customer value.

Customer needs are qualitative information and are, to a high degree, the outcome or desired result your product produces from a customer's point of view. Customer needs are subtle elements that

The customer's world



describe what customers want to improve in the present situation. Gaps that they would like your new product to close.

An effective way to categorize customer needs is to link them to value. This categorization increases the understanding of the different types of needs and resource concerns the customers may have. Each category offers unique ways to enhance customer value. Essential is to understand and document the potential in each category. Get a comprehensive understanding of all your options for increasing customer value. We have three types of generic customer needs as follows:

• **Problems**

The first and most critical category is problems. Problems are always associated with pain or annoyance for the customer, and customers are willing to take immediate action to eliminate them. Problems always have this sense of urgency to be solved. If not, it is not a problem.

Understanding a significant customer problem nobody else has realized is the holy grail of creating a WoW product. You are on the winning track if you can identify and solve a critical customer problem with your new product. Solving significant customer problems is the best way to take a quantum leap in customer value.

- **Results**

The second category of needs is results. This category is about solving the same old problem but in a superior way, creating value for the customer by offering a better solution. While the motivation to achieve more gains is lower than to escape pain, it can still be a competitive advantage that tips the buying decision in your favor. However, don't expect customers to act immediately to achieve more results.

- **Feelings**

The third category of customer needs is emotional in nature. It is all about what the customer wants to feel or experience using your product. Things that evoke positive emotions, such as joy, pride, and self-esteem, always enhance customer value.

Resource concerns are the denominator of the customer value definition. Resource concerns harm customer value and represent things the customer wants to be reduced or eliminated. Unfortunately, the Value Management standard does not define resource concerns, so I have developed the following definition:

- **"A customer resource concern is anything that is unacceptable or inconvenient for the user."**

Resources concerns differ from needs as they always have a maximum upper limit. For example, there is a limit to how much money customers can spend on a product. Even if you have the best product and customers love it, they might not be able to afford it.

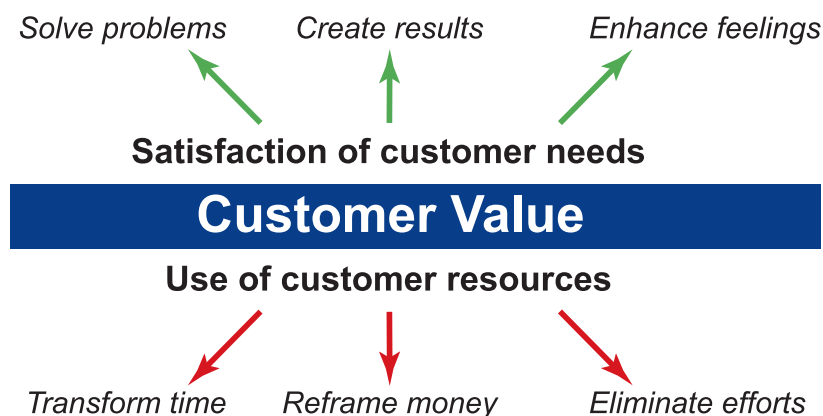
To link customer resource concerns to value, I have identified three generic categories:

- **Money**

All customers experience discomfort when parting with their money in exchange for your product. All costs of buying, running, and servicing the product reduce value. The key is to reduce the perceived cost, not just the actual price in cents and Euros. In all organizations, there seems to be a group of people chanting the mantra – our price is too high, our price is too high. However, price is a complex issue that affects the customer's perception of value in multiple ways. A high price may also affect the customer's perception of quality or status.

- **Time**

Time is a valuable resource that is often underestimated. While it's true that "time is money," in the context of customer value, time cannot be directly converted into money. What matters is the customer's experience of time, and "wasted" time is particularly damaging. Unnecessary or uncalled-for activities can lead to feelings of frustration and wasted time. Time is often the scarcest customer resource of all. It can be the delivery, installation, or time before somebody answers the customer's support request.



- **Efforts**

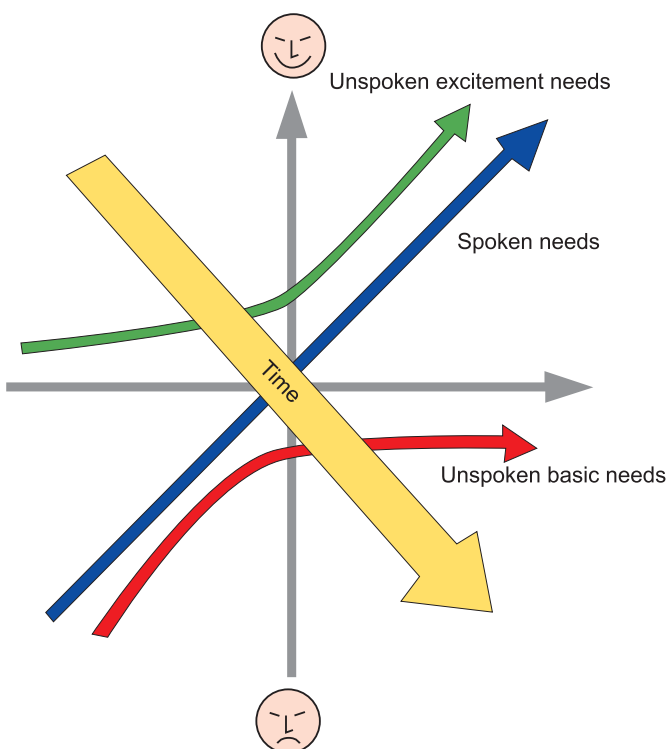
Effort is a critical customer resource that is often forgotten. Efforts can significantly reduce customer value by triggering unpleasant and negative emotions. A single bad experience can lead to customer loss and negative word-of-mouth. Efforts can be physical (handling and using the product), mental (understanding, configuring, or learning how to use the product), or emotional (frustration, anger, anxiety, impatience, or stress).

All three types of effort hurt customer value. To recap, there are three categories of customer needs that can increase customer value:

- **Problems** - the new product should eliminate customer pains
- **Results** - the new product should generate substantially more customer gains
- **Feelings** - the new product should make the customer feel good about buying and using the new product.

There are three categories of resource concerns that have the capacity to reduce customer value:

- **Time** - the new product should minimize wasted time and make the customer's time productive.



- **Money** - the new product should put your price in a favorable perspective and reduce the perceived cost for the customer.
- **Efforts** - the new product should make the customer journey easy, effortless, and enjoyable.

5.2 The Kano Model

It is obvious that merely asking the customer and then just doing what the customer says is not good enough because the customer also has unspoken and hidden needs. Therefore, the customer must be involved in the development process, but this alone cannot guarantee a complete and proper picture of customer needs and resource concerns. According to Kano, there are two types of unspoken needs that customers cannot articulate or never will tell you even if you ask them:

Unspoken basic needs

The customer takes unspoken basic needs for granted and forgets to mention them when asked. Unspoken basic needs can be, for example:

- established practice: everyone in the industry does it the same way.
- tradition: it has always been done this way.
- safety: the customer doesn't expect a supplier to sell a dangerous product.
- laws and public authority approvals: the customer assumes that laws and regulations are followed.

The only time unspoken basic needs become spoken is when the customer discovers that they have not been met and, in some cases, not even then. The most common way a customer shows dissatisfaction is to change supplier.

Care should be taken when drawing conclusions from few or no customer complaints. Widespread dissatisfaction may lie below the surface.

Unspoken Excitement needs

Unspoken excitement needs, on the other hand, are needs that the customer does not believe or understand can be met by the product. Unspoken excitement needs can be, for example:

- needs outside the existing paradigm of what the product is capable of performing
- latent needs that the customer has been unable to formulate or articulate.

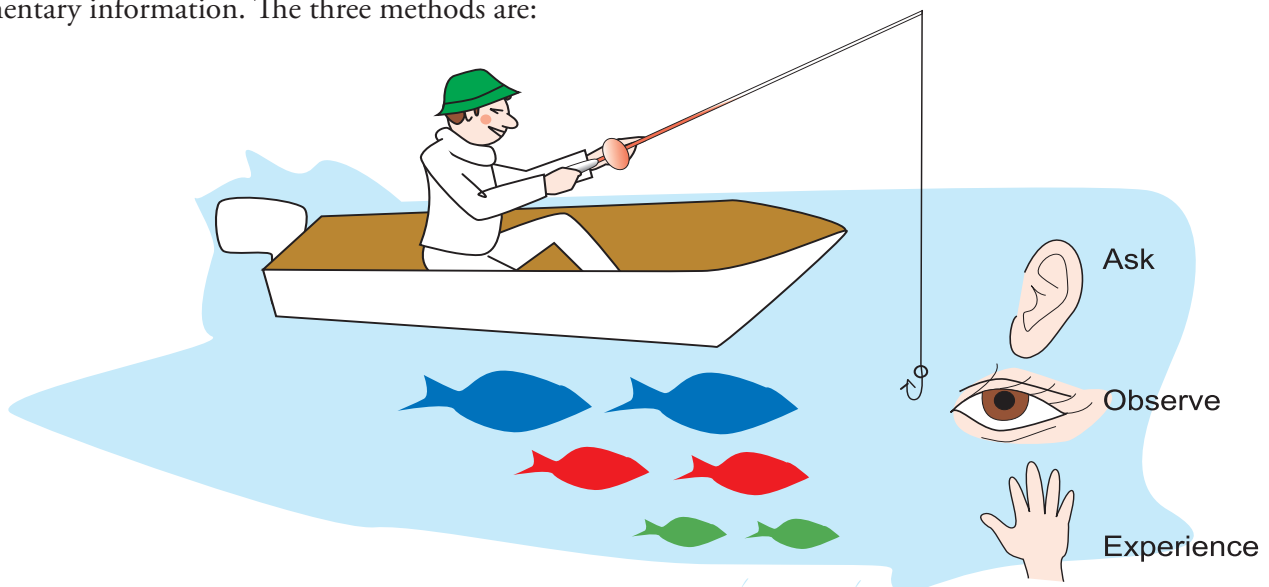
Ideas for unspoken excitement needs are often based on a deep understanding of the customer's situation and current shortages and shortcomings of present products.

Needs often evolve over time. What initially starts as an unspoken excitement need will transition into a spoken requirement and eventually become an unspoken basic need. Cars are an excellent example of this. New features are introduced with every new car generation. When first introduced, they represented a clear feature associated with an unspoken excitement need, something novel and unexpected that enhanced the customer's experience. As a result, customers began to request this feature in vehicles, transforming the need into a spoken one. Years later, automobile journalists and trendsetters view them as a fundamental requirement. A new car does not achieve a top rating without the feature.

So, whatever feature I mention now as an unspoken excitement need is either spoken or taken for granted when you read this text. This is how fast it goes.

5.3 Three methods to capture customer needs and resource concerns

Think of customer needs and resource concerns as fish in a sea of information. Just as different fish require specific bait, you need different methods to capture the whole spectrum. In principle, there are only three methods for capturing customer needs and resource concerns: All three methods must be used as they all supply complementary information. The three methods are:



1. Asking the customer

Asking the customers via in-depth interviews, focus groups, and similar activities. Customer visits and in-depth interviews are the two most powerful methods to get a grip on customer needs and resource concerns. I advocate a method called "The voice of the customer." The rest of the chapter will discuss this method in more detail.

2. Observing the customer

Observing the customers using the product and studying their background, history, and business. Just about everything can end up being done through force of habit. Even the customer develops blind spots and forgets about a specific need even though something within the product once was considered complicated. You should, therefore, watch both experienced and inexperienced customers using the product. In other cases, the customer may have discovered an ingenious way to use the product or has changed and adapted it so that an unspoken need has come to light.

Reviewing the previous year's sales and claims statistics. The more you know about the customer's situation, context, and business, the better equipped you are to capture both unspoken basic needs and excitement needs.

3. Experience what the customer does

Putting yourself in the customer's shoes by performing the same activities the customer must do, such as ordering, installing, operating, servicing, and repairing the product. Do it yourself, have a new employee take on this task without

preconceived notions, and see what problems and difficulties arise. Attempting to be the customer helps capture unspoken needs that the customer has difficulty articulating.

Applying all three principles can create a good understanding of spoken and unspoken needs and resource constraints. Therefore, the conclusion is that the customers must be involved in the development process, but this alone cannot guarantee a complete picture. Each source of information contributes a few pieces required to complete the puzzle.

5.4 The voice of the customer

Capturing customer needs and resource concerns involves customer visits, which can be challenging due to tough internal resistance. These are some of the arguments you need to be prepared to meet:

- Our salespeople visit customers regularly, so we already know what customers want. You just need to ask our salespeople.
- The customers lack technical knowledge and can, therefore, not provide any valuable information. It is a waste of time to speak to the customers.
- Customers do not have a unified opinion and hardly agree on anything, making it unclear who to listen to.
- Customers' opinions change frequently, so you will never get a consistent answer.
- Customers are only interested in a low price. Negotiations always end up being about price, and the main reason given for every lost order is that our product is too expensive. Just develop a cheaper version!

You are probably already familiar with some of these objections. The problem is that there is some truth in them, but at the same time, they are founded on a bed of wrong assumptions. Customers must be visited, but this doesn't mean any odd customer asked any odd question in any odd manner by any odd person. This is not a checkbox activity. The use of simplified methods will always result in poor results. Other development teams' sloppy work and use of simplified methods often make your uphill battle even harder.

In some organizations, maintaining a monopoly on customer information can also be part of the political power game. Some salespeople regard the customer as their own and do not want outsiders involved. This is an entirely unacceptable situation, but don't underestimate the difficulties of company politics.

Employing a systematic and reliable process is crucial to capture, document, and meet customer needs and resource concerns. It involves multiple interactions with customers throughout the development project. Each interaction builds upon the previous one to refine the information and ensure you are on the right track. Following this process will increase the likelihood of developing a WoW product and reduce the risks of failure.

The initial two loops are called the "Voice of the Customer." They should be conducted early in the project. This phase is crucial in gathering valuable customer insights, which will be the foundation for the development work.

The next three loops serve as successive verifications that you have accurately understood the customer's needs and resource concerns and that the product under development meets the customer's expectations. These loops ensure that the product is aligned with the customer's requirements and that potential issues are identified and addressed early on.

5.4.1 Capturing customer needs and resource concerns, loop 1

Conducting in-depth interviews with customers on-site at the location where the existing product is used is the most effective way to gather required insights. This approach allows customers to relate to the questions more easily and enables the interviewer to capture subtle needs that might not be apparent otherwise. Additionally, it provides the product development team with a deeper understanding of the product context.

It is recommended that all project team members visit at least one customer and conduct at least one in-depth interview. This will give them a firsthand understanding of the customer's needs and resource concerns. No specification can cre-

ate the depth of understanding that a customer visit does.

When conducting these interviews, it is best to work in pairs. Preferably a salesperson with a social role and a development engineer conducting the in-depth interview. This combination allows the development engineer to ask so-called “stupid questions” without losing credibility, something the salesperson probably should avoid. Asking “stupid questions” is essential for avoiding misunderstandings and getting more nuanced and accurate information. Maybe the customer says, “*Quality is of the utmost importance.*” A so-called “stupid question” would be to ask the customer to explain what quality means to them.

The objective of the interview is to listen and learn, not to sell or defend the product or your company. It is essential to avoid any hidden agenda, as this can compromise the interview’s integrity. Maybe the customer has completely misunderstood something about your present product or what your company does. This is not the time to correct such misunderstandings. On the contrary, now is the time to learn more and try to understand why it is like that. Now, it is essential that the salesperson does not attempt to position your company in a more favorable position. Listening and learning might be challenging now, especially if it isn’t very comfortable for you or your colleague. It is essential to leave your egos at the door. Instead, the customer should feel that you and your company are genuinely interested in understanding their problems. Now is the time to ask the customer to tell you more about the subject so that you understand the full depth of the misunderstanding.

Another rule of thumb is that the two interviewers only interview one customer at a time. If more customers are in the room, they will influence each other. It will also make it harder for you to control the interview. There is a high risk that the customers will start discussing the issue between themselves and that you will have difficulty understanding what is being said.

Before you start asking questions, make a thorough introduction of what will happen, how you



Asking customers “why” fills the air, but asking “how does it feel” finds meaning.

intend to use and store the interview material, what the customer will get out of the interview, etc. The first step is establishing rapport and trust between the interviewer and the customer. Be careful not to promise the customer something that you cannot fulfill.

If the customer permits, a tape recorder and digital camera are recommended, as these tools can help create a valuable bank of information. This is the time to convince the customers that you can use them.

I have participated in numerous projects where audio recordings or pictures have provided the development team with food for thought and a deeper understanding when these are analyzed later. Taking correct and complete notes during an in-depth interview is nearly impossible. You will have enough on your plate to ensure that the in-depth interview moves forward in the best possible way.

I recommend using interview cards to guide the interviewer through the four phases of the in-depth interview process. They are excellent memory joggers for managing the four phases that will be repeated several times.

Card 1 Introductory questions

Card 1 should include your prepared open-ended introductory questions. Here are a few examples:

- What is your experience of ...?
- How would you describe your involvement with...?
- Can you share your knowledge regarding...?

Avoid questions that guide the customer in a specific direction, such as “What problems have you experienced with...?” or “What are the biggest advantages of...?” The more experienced you are, the fewer Introductory questions will be needed. If you use inexperienced development engineers, around ten to fifteen would probably be sufficient.

Sometimes, the battery of Introductory questions should cover the entire customer journey or cycle of care, from installation to up-cycling. Other times, they should cover the product usage during one day or all the stakeholders’ roles in making purchasing decisions. By establishing a theme for the entire in-depth interview, you ensure that your data do not contain gaps essential for the understanding.

Card 2 Clarifying questions

Card 2 contains your Clarifying questions, which are preferably combined with your body language. Be aware of technical terms and jargon used in your industry. Even more general terms,

such as quality, reliability, environmental footprint, etc, may have a completely different meaning for the customer. Here are a few examples of Clarifying questions:

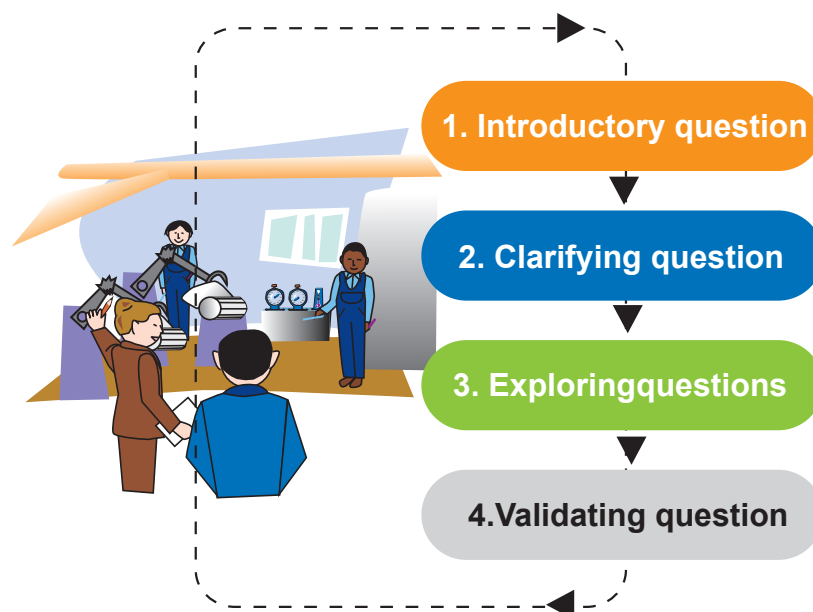
- How do you define quality? What impact does quality have on your business?
- You mention reliability as very important. Could you please elaborate on what that means to you?
- I am not sure I understand. Could you please explain what an environmental footprint means in everyday language? (A brilliant, so-called stupid question!)

Card 3 Exploring questions

The purpose is to drill down deeper and get a better and more complete understanding of the topic discussed. Remember that there is always at least one extra “probing” question that should be asked:

- Please give an example ...?
- What is the consequence ...?
- How did you feel about ...?

When probing, it is crucial to avoid asking, “What do you want?” as this can lead to customers simply describing an already familiar solution rather than their actual needs. Similarly, asking “Why?” can imply that there is a logical explanation when, in fact, the underlying reason may be emotional. Be careful with using the why question.



Card 4 Validating question

Card 4 contains a reminder to summarize and validate what you have learned. It marks the end of the topic discussed, allowing you to take the in-depth interview in a new direction. By rephrasing what the customer has said, you also allow the customer to reflect on this and perhaps fine-tune or correct if you have misinterpreted or misunderstood something. It is a way to secure and validate the information:

- May I please double-check with you that I understand you right? You said that quality will ...
- I need to explain this to my colleagues back home. Is it correct to say that quality will ...

By shuffling the cards, you remind yourself to follow the four phases and also how to manage each phase. It also gives your interview a professional look in front of the customer.

It is easy to bias the information already at this stage if you are not careful. If you take notes, you will most likely only write down statements reflecting your preconceived ideas. Concepts new to you are challenging to understand. Don't try to interpret what the customer is saying. Instead, stay close to what the customer actually said. Quite literally, try to use the customer's own words.

Value Statements

The aim is to collect sound bites or short phrases for future prioritization and benchmarking. These phrases should be captured and formulated in a language familiar to and easily understood

by the customer. I call these sound bites for value statements as they capture a customer need or a resource concern. A value statement always consists of two parts in the following way:

- **The element**

An element is something perceivable by the human senses, often an action verb or abstract noun. Understanding word classes helps formulate value statements. They clarify the structure and meaning of a sentence. Action verbs, such as place, remove, read, and learn, describe actions or activities to be performed by someone. Abstract nouns represent intangible concepts, emotions, or ideas rather than physical objects. Examples include quality, reliability, and safety.

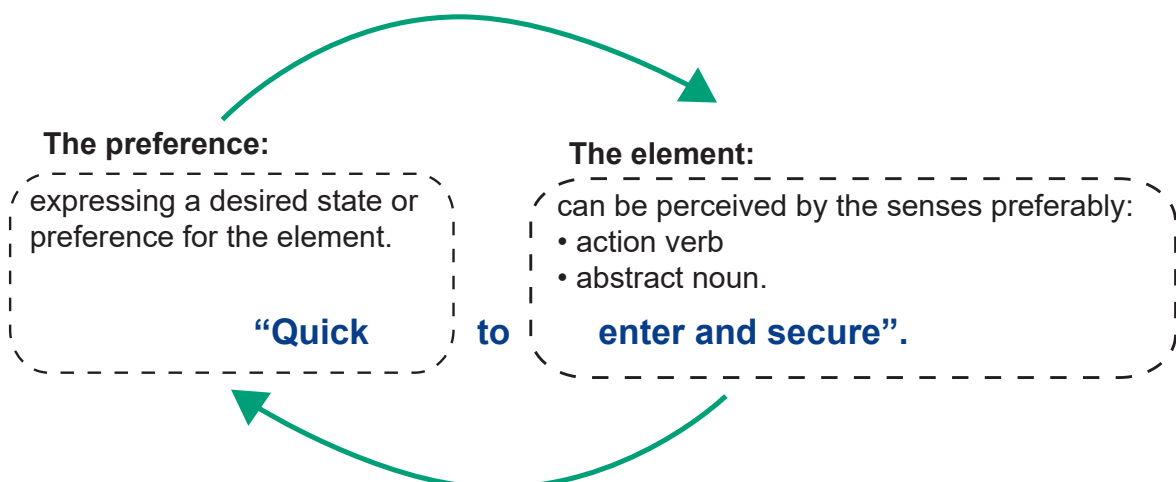
- **The Preference**

The Preference describes the desired state or condition the customer prefers for the element. The most common word classes used to express preferences are adjectives and adverbs. Adjectives provide more information about a noun's characteristics or qualities. Examples of adjectives are quick, quiet, or easy. Adverbs provide information about a verb's manner, time, place, frequency, or state. Examples of adverbs are quickly, silently, or often.

- **Structure**

Sometimes, the element comes first, and the preference last, as in this sentence: *Reliability would be my first choice.* Sometimes, the element comes last, and the preference first, as in this sentence: *Safely removed.*

Try to capture the nuances preferred by the cus-



tomers. It is easy to end up in the swamp of trivial value statements such as High quality, Easy to install, and Low price. You don't need to conduct in-depth interviews to capture those. Instead of routinely using easy, many other adjectives may describe things more precisely. When it comes to value statements, the magic is finding nuances nobody has understood before. What does easy mean for the customer? Maybe a better formulation would be:

- Simple to install
- Quick to install
- Convenient to install
- Effortless to install
- Intuitive to install
- Uncomplicated to install
- Practical to install
- DIY-friendly to install
- Labor-saving to install

Value statements are qualitative information as there are no established methods for quantifying, Intuitive to install. This is as it should be in the Needs Domain of information. As soon as you see a value statement describing something, you can measure you have missed the point. If you work in a business-to-business environment, you may think that customers are rational. That all decisions are based on facts. Customers are humans and have feelings and emotions like all the rest of us. Feelings and emotions that a WoW product must meet in a superior way.

When conducting in-depth interviews, be aware that the customers mix up Needs with Functions, Solutions, and Processes. For example, the customer might say that the product has to be equipped with stainless steel screws. Stainless steel screws are a technical solution that the customer believes meets a particular need. The need is the problem the customer believes stainless steel screws will solve.

A little warning signal should be activated whenever the customer expresses needs through Functions, Solutions, or Processes. In such cases, further Exploring questions must be asked to understand the underlying need.

Research has shown that carrying out approximately 20–30 interviews and interactions with the customer captures around 80–90% of all spoken needs. Around 20–30 interviews are also a manageable activity for a development project. Now, let's summarize what you learned. Here is an in-depth interview between the maker of endotracheal tubes (secures the airways of patients) and the anesthesiologist (a type of medical doctor). Can you capture the needs?

- **Interviewer:** *Can you share your knowledge regarding endotracheal tubes?*
- **Anesthesiologist:** *As I often work under stress and time pressure, a tube that is quick to enter and secure is extremely important, especially in patients where time is a matter of life and death. I need a tube that can be inserted easily and swiftly without compromising the patient's airway to ensure a smooth and safe intubation process.*
- **Interviewer:** *Could you please elaborate on what you mean by secure?*
- **Anesthesiologist:** *By secure, I mean that the tube should be firmly positioned in the trachea, with no risk of displacement or dislodgement. A secure tube ensures that the patient receives adequate oxygenation and ventilation, which is essential for survival.*
- **Interviewer:** *What is the consequence if the tube is not secure?*
- **Anesthesiologist:** *If the tube is not secure, it can lead to a range of serious complications. For instance, the tube may become dislodged, causing the patient to experience respiratory distress, hypoxia, or even cardiac arrest. In extreme cases, this can result in brain damage, long-term neurological deficits, or even death.*
- **Interviewer:** *May I double-check with you that I understand you right? Do you mean the tube should be securely positioned in the trachea to prevent complications and ensure patient safety?*
- **Anesthesiologist:** *Exactly. A secure tube is essential to ensure the patient's airway is protected and that they receive the necessary oxygenation and ventilation. It's a critical aspect of patient care, and I rely on the quality and performance of the endotracheal tube to get the job done.*

You could probably harvest a few more value statements from this interview, but the following are all good examples:

- *quick to enter and secure*
- *inserted easily and swiftly*
- *without compromising the patient's airway*
- *smooth and safe intubation*
- *firmly positioned in the trachea*
- *no risk of displacement or dislodgement*
- *ensure the patient's airway is protected.*

By now, you realize that 20-30 interviews will result in hundreds of value statements. This is the divergent part of the process, increasing your organization and development team's understanding of the customer's situation, the product context, customer needs, and resource concerns. The process ensures no essential aspects that can increase or harm customer value are lost.

The second part is the convergent part, synthesizing and boiling down all value statements to a manageable number for prioritization in the next step. To compress and boil down value statements, we recommend using affinity diagrams. This method structures and compresses qualitative information that cannot be quantified using mathematical or statistical methods. It helps to show the underlying structure of qualitative information and supports a common understanding of information within a work group.

The goal is to create a tree diagram of three levels. The top level should contain around 20 to 25 value statements, and the bottom level should include all your collected value statements from the in-depth interviews and other sources such as observations or "being ghost customers". Often

several hundred. Level two is just an intermediate step that simplifies the work.

1. Start by eliminating all duplicates.

Write down the remaining value statements on adhesive paper, for example, Post-it notes, one statement per paper, along with the source of the value statements. It enables you to go back and revisit the interview if necessary.

2. Organize all value statements in groups of similar value statements.

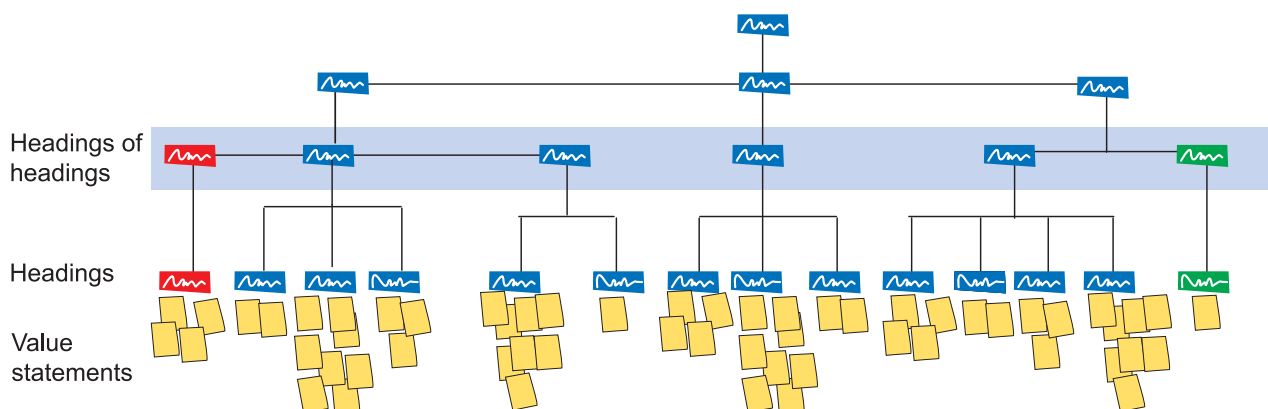
If one group becomes too big, this may indicate that you need to divide it into several smaller groups. At least one group will probably only contain one value statement, which is ok. Continue this until you all agree that the correct number of groups has been identified, and each group contains only closely related content. It is better to have too many groups than too few. Starting with 300 to 500 value statements, you should now have around 75 to 100 groups.

3. Select one value statement as a heading for the entire group.

If not, construct a new value statement by combining words from several statements. As far as possible, stick to the language used by the customers.

4. Headings of headings

Using the same technique, now group the 75-100 value statements at level two into new groups and select one value statement as a heading for the entire group. If not, construct a new value statement by combining words from several statements. You should now have around 20-25 value statements.



Check that you have not used anything besides words and statements used by customers in the top level of 20-25 value statements, with no interpretations or adding of internal thoughts. It should be possible to climb up the tree by asking the questions Why? and down by asking How?

5.4.2 Statistical prioritization of needs and resource concerns and benchmarking

The next step is to gather feedback from a sufficient number of customers to understand their priorities and benchmark how well your existing product and competitors' products meet the value statements. This information is crucial for differentiating your new product by identifying gaps that can be filled with your new product, thereby taking a quantum leap in customer value. This insight should form your development strategy.

I recommend employing a simple but powerful process for prioritizing value statements and benchmarking. This process has proven its strength in numerous projects globally. Instead of traditional forms, we use a deck of cards, each card containing one value statement.

Traditional questionnaires often ask customers to rate things numerically, for example, on a scale of 1 to 5. Such a method will not provide a correct result in a global survey. Cultural differences impact the interpretation of scores. A 5 in France is not the same as a 5 in Norway. Our approach yields better results by performing the following game mechanics:

- The first step is to sort the cards as evenly as possible into three groups – Least important, Important, and Most important.
- The second step is to sort the cards in each group from the most important to the least important. A forced ranking in order of importance. Place the most important card at the top and place the rest in order of importance all the way down to the least important at the bottom.
- The third step is to merge the three groups into one pile, with the most important group at the top, the important group in the middle, and the least important at the bottom.

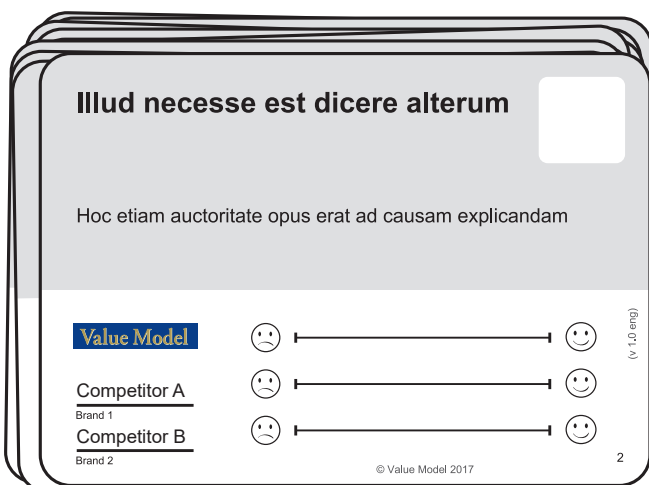
The above process ensures that the most important value statement ends up at the top of the deck of cards while the least important value statement ends up at the bottom. This approach filters out all cultural differences and ensures clear and comparable results.

The entire method of using decks of cards utilizes gamification principles, making the process more enjoyable and a better learning experience for the customer. The customer's most significant need is often to understand what they need. This method helps the customer form their own opinion on what is important and what is not. This learning experience is enhanced if the value statements are written in a language the customer is familiar with.

Each card includes:

- A value statement and simplified user story
- A field for evaluating the importance
- A field for filling in the result of the forced ranking, 1 for the most important value statement, 2 for the second most important value statement, etc.
- A field for benchmarking your own offering and up to two competing offerings.

It's often unnecessary to have customers prioritize and evaluate unspoken basic needs, as they typically must be fulfilled anyway. For practical reasons, it's also cumbersome for customers to manage more than 25 cards.



Usually, all stakeholders on the customer chain use the same deck of cards. They often view the same value statement differently, which is also valuable information when developing a new product.

The best option is to sit down with the customer and go through the deck of cards. This might reveal interesting issues that may otherwise have remained hidden and can now be captured and documented. It gives the development team a more in-depth understanding of the customer's situation, needs, and concerns. The process takes about 20 to 40 minutes if 25 cards are used, and someone can answer any questions.

Be creative and try to have customers fill out the deck of cards at established touchpoints. It can be during a sales call, customer training, service call, or even at your display at an exhibition.

It is essential to have an unbiased selection of customers participating. There is an obvious risk that only the most faithful and loyal customers will be invited to participate, providing a false sense of security. Ensure that a portion of the customers involved are former customers and that some are faithful and loyal to your hottest rival.

One question always asked is how big the sample size needs to be. The boring answer is that it depends on the following:

- The number of groups or subgroups that need to be analyzed.

Examples of subgroups could be existing customers versus potential customers or stakeholders along the customer chain. The more groups and subgroups you must explore, the bigger the sample size.

- The accuracy required of the result.

The amount of money and resources spent should be in harmony with the total project budget, the risks involved, and the information already available.

- The cost of each sample.

A larger sample size can be justified if it's easy and costs are low.

- The variability of the population.

If the segment is entirely homogenous, all the customers have the same opinion, and a sample size of one is satisfactory. This is usually only the case if the segment only consists of one customer. Most segments are more or less heterogeneous, and customer opinion varies. A sufficiently large sample size helps filter out extremes to find the happy medium.

- How many customers exist within the segment and target group selected?

There are extreme cases in which the number of customers within a segment can be counted on one hand. All the customers must be included in these situations. On the other hand, there are products with millions of customers, and statistics are required to make a suitable selection and summarize and interpret results correctly.

The more precision you want, the larger the sample size you need. According to the central limit theorem, the normal distribution can be used as an approximation of the sampling distribution if the sample size is at least 30 per group to be analyzed. Analyzing the variability in customer responses may, therefore, be a method of assessing the reliability of the results. If variability is low, perhaps 50 to 100 decks of cards would be sufficient. However, if you are faced with responses spread over the entire scale of possible answers, great care should be taken when drawing conclusions, and probably is the market segmentation wrong.

It is important to remember that the aim is not to produce a statistically correct answer down to the third decimal place but to increase understanding of customer needs and resource concerns. In some cases, the opinions of a few specific lead users or big customers may carry more weight than all the other customers combined.

Take caution when taking the results of any marketing study as the absolute truth. There are many sources of error in the selection of customers and difficulties in gaining a high enough response frequency. There are needs that customers will never evaluate truthfully for personal or other reasons. Few customers will confess that the main driving

force behind purchasing that new car was to impress the neighbors. Price is another area where getting an accurate and unbiased answer is very difficult. Even if the customer thinks your product has an attractive price, they will not tell you about it for political reasons.

It is also essential to consider which alternative offerings to benchmark against. Besides your product, if you have one, I recommend selecting the leader in the market or your hottest rival along with an interesting rising star: a rising star with an unusual product or concept that has broken free of existing paradigms. Maybe this rising star has succeeded in satisfying important needs in a better way, from which you can learn.

The result should finally be analyzed statistically to determine the strengths, weaknesses, opportunities, and threats of your present offering. This analysis is done like this:

- Strengths constitute the most important value statements your current offering meets exceptionally well, preferably in a much better way than your competitors.
- Weaknesses constitute the most important value statements your current offering does not meet. In the worst scenario, you are considerably poorer than your competitors.
- Opportunities constitute the most important value statements that no offering in the market meets to the customers' satisfaction. If your new product can fill this gap, it could become a WoW product.
- Threats constitute value statements that the customers find unimportant and that your competitors meet more satisfactorily. These may become important to the customer in the future and can, therefore, become a weakness quickly.

The result of the above evaluation of value statements can be efficiently summarized in a so-called Preplanning matrix. In its most simple form, a Preplanning matrix consists of the following:

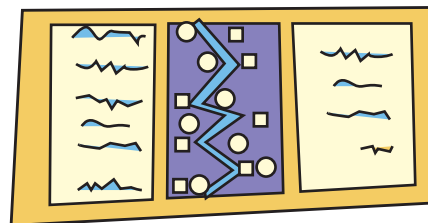
- A column with the value statements listed in order of importance.
- A column illustrating how well your product

and rival product offerings meet these different value statements, the benchmarks.

The issue of having the customer prioritize value statements and benchmarking different concepts may be summarized in the following way:

- A careful condensation of all value statements to a workable size of 20-25.
- A proper choice and sufficient sample size of customers to participate in the survey.
- A prepared questionnaire in the form of decks of cards, each card representing a value statement.
- A statistical analysis of the deck of cards returned from the customers.
- An analysis of the result to determine the strengths, weaknesses, opportunities, and threats in your present offering on the market.

Preplanning matrix



- Identifying gaps that, if filled with by the new product, will make a quantum leap in customer value.

The top three to five value statements can preferably be described in more detail as use cases. A use case illustrates how a user interacts with a product, system, or service to achieve a specific goal or solve a problem. It outlines the steps the user takes, the actions they perform, and the outcomes they expect. Use cases help developers and designers understand user needs and constraints.

A typical use case includes:

- A goal or objective
- The main success scenario
- Alternative scenarios
- Error scenarios
- Postconditions

5.5 Looks like a real product - the third loop of customer interaction

Verification is a crucial step in creating a WoW product. Verification needs to shadow the project from the Voice of the Customer (VoC) to the start of full production. By verifying the product at each stage of development, you can identify and fix errors early on, reduce the risk of costly rework, and ensure that the final product meets customer expectations.

The first verification loop is to have customers evaluate one or more concepts. I recommend using design models of the best concepts. A design model has the same color, form, and size as the final product but may not work correctly. Instead, you fake the functionality behind the scenes. The focus now is on aesthetics, visual expression, tactile experience, and brand identity.

The logic behind this is that most people have trouble visualizing the final product if you present a prototype that is too bulky, too cumbersome, and with cables going every which way. It doesn't matter that you argue that the final product will look different. You can never get fair and trustworthy feedback from such a prototype. And if you show it to management, they might even kill your project.

5.6 Works like a real product - the fourth loop of customer interaction

The second verification loop involves functional models or prototypes focusing on the product's functionality rather than aesthetics. A functional model may not necessarily have the correct color,

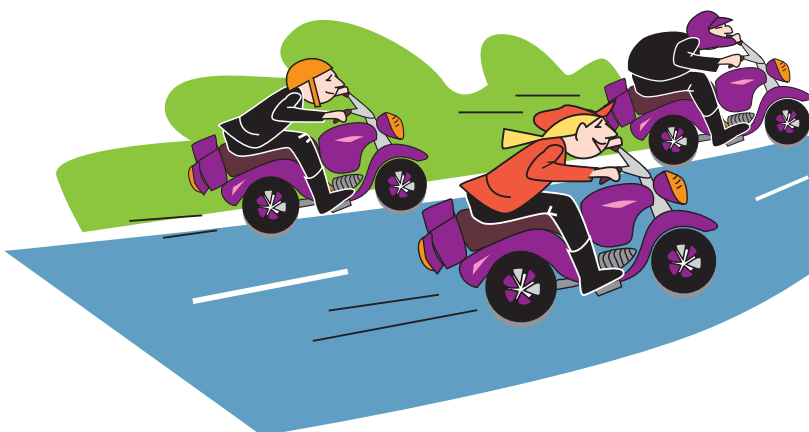


**The slogan for this loop is:
Fake it before you make it!**

shape, or form. For that, you have your design model. The critical aspect of this loop is that customers should be involved in testing and evaluating the product's functionality and provide feedback. Customers should be encouraged to try, test, and systematically evaluate the product's functionality to gather accurate feedback.

The use of functional models in the second verification loop offers several benefits. Early identification of drawbacks can be made, reducing the risk of costly rework and later improvements of the product's functionality.

The slogan for this loop is: Test it before you perfect it!



5.7 Sells as a WoW product - the fifth loop of customer interaction

The third verification loop may be more unusual, but it is nonetheless equally important. As you near the end of the

development process, gathering feedback from the manufacturing, distribution, and sales of your pilot production is essential.

This is your final opportunity to fine-tune your processes and ensure your product is ready for full-scale production. The old adage “the proof of the pudding is in the eating” rings true here, as the feedback you receive will directly reflect your product’s performance in real-world scenarios. Using the final processes as closely as possible is crucial to get the most accurate feedback. This means that the manufacturing, distribution, and sales teams should use the same processes and procedures as will be used in full production. It will give you a realistic understanding of how your product will perform in the market and identify any areas that need improvement.

While every project is unique, five loops of interaction with the customer during development can be seen as a guideline or rule of thumb. This approach ensures that you have thoroughly understood customer needs and resource concerns and verified that your new product has the potential to become a WoW product.

5.8 Summary

In my experience, few development projects have access to high-quality, value-critical information in the Needs Domain. This, combined with the push to reduce time to market, creates an unfortunate combination. Much of this work could be conducted before the development project starts. The result of analyzing value-critical information in the Needs Domain should trigger new development projects, and not vice versa.

However, only a few companies possess that capability today. Instead, development projects are sometimes forced to conduct a usually unstructured “Voice of the Customer” initiative under significant time pressure.

All the WoW products I have followed throughout my career have incorporated a “Voice of the Customer” in some capacity. This element has proven essential in understanding customer needs and aligning product development with market demands. By prioritizing customer insights, com-



The slogan for this loop is: Pitch it before you produce it!

panies can foster innovation and create offerings that resonate deeply with their target audience.

Value-critical information in the Needs Domain of information may contain the following:

- A well-thought-out selection of the right customers within the market segment or target group to participate in the VoC. A selection that will not bias the data and is in harmony with the innovation level of the new product to be developed.
- Sound bites or value statements collected from 20 – 30 in-depth interviews with the carefully selected customers.
- A visual library of pictures or videos of actual customers in action using the present products or solutions.
- A summary of findings based on being ghost customers. Putting yourself in the customers’ shoes and performing the same tasks.
- A comprehensive review of all value statements to ensure they are correctly articulated in the customers’ own language and include a clear preference and element.
- An infinity diagram condensing all value statements and findings to a manageable size of 20-25 value statements.
- A professionally made deck of value cards and

a sheet with customer profiling data.

- Statistical data from a sufficient number of customers that have prioritized 20-25 value statements and the degree of satisfaction achieved by the present solutions.
- Identification of customer needs or resource concerns with substantial value gaps. Opportunities for building unrivaled customer value in the new product.
- A three-step verification process for the new product:
 - Design Models: “Fake it until you make it.”
 - Prototypes: “Test it before you perfect it.”
 - Pilot Product: “Pitch it before you produce it.”