Discovering the Kano Model

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Introduction to the power of the Kano Model

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I was introduced to the Kano Model back in 1988 while working early in my career at Ford Motor Company. Twice I had the great pleasure of meeting the creator of the model, Dr. Noriaki Kano, once in 1991 at one of his lectures at Ford, and the second in 2006 in a Kano Masters workshop he led in San Diego. Even though Dr. Kano originally created his model back in 1984, I truly believe it is more relevant today, than ever before, primarily because of the increasingly global and competitive marketplace coupled with the customer having more choices and being more demanding than ever before.

Dr. Kano created this model while studying the contributing factors to customer satisfaction and customer loyalty. He wanted to demonstrate and explain how different "classifications/categories" of customer requirements and features have the ability to influence customer satisfaction in different ways. In any business, knowing how your customer requirements impact satisfaction is very important when prioritizing development efforts and managing product development resources. Having said this, the Kano Model goes far beyond the simple ability to see how requirements and features influence satisfaction. In the following article I will attempt to clearly introduce and explain the Top 5 "Kano Model Take-Away's" that I believe everyone developing products and services should understand.

(1) There are five categories of customer requirements that have uniquely different effects on customer satisfaction!

Not all customer requirements have the same ability to deliver high satisfaction when done well. Now this sounds rather obvious, but there is a distinction Kano discovered that is worth noting. You could have two customer needs that are equally important and one will cause high satisfaction when done well and the other will leave the customer neutral when done well. To further illustrate, one customer requirement could be far more important than another requirement, but if they are both executed very well the less important one may be able to increase satisfaction far more than the more important requirement. This is because the two requirements fall into two different categories, each which has a different influence on delivering increased customer satisfaction. For example, take the brakes and fuel efficiency of your car. If they are both done very well, and assuming it is more important to stop the car well at a traffic light than it is to get great fuel economy, it is only the less important need, fuel economy, that has the ability to greatly increase

satisfaction. Having a car that breaks very well at a traffic light will only leave the typical driver neutral because braking well at a stop light is a given, it is assumed. This does not mean that we don't have to worry about braking, it means that improving braking will likely have little effect on increasing satisfaction. The point here is that you must couple the importance of a particular need with the Kano category it falls into to help prioritize your improvement efforts and determine your future development goals. Dr. Kano discovered and classified 5 categories of requirements. 3 of the categories are very common and should be included in your offering and two are relatively rare and should be excluded from your offering. Kano explains and illustrates these 5 classifications on the axis shown in Figure 1.
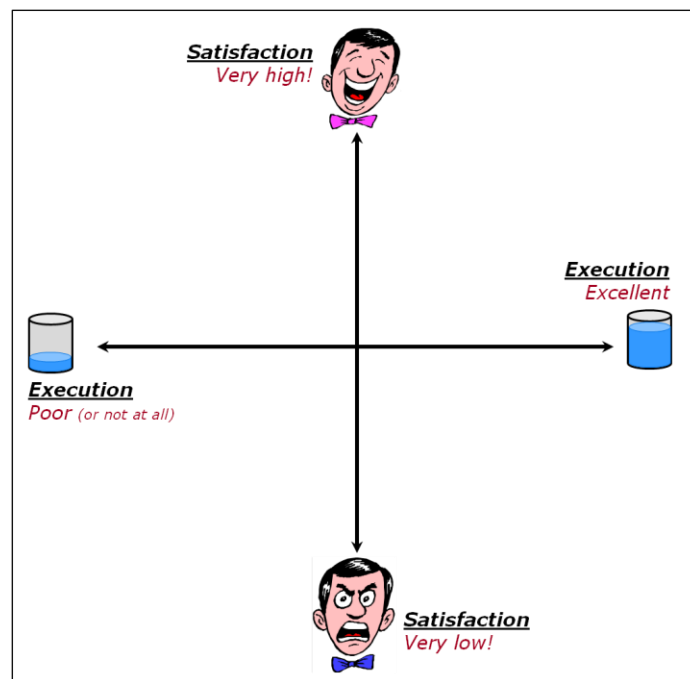

Figure 1

The horizontal (x) axis is the degree of fulfillment or execution. On the right extreme is fully executed, on the left extreme is not done at all or very poorly. The vertical (y) axis is the satisfaction level for a particular requirement, on the top, very satisfied and on the bottom, very dissatisfied. Dr. Kano used this set of axis to graphically show the 5 categories of customer needs.

a. **Performance** – These are the requirements the customers are able to articulate and are at the top of their minds when making choices and evaluating options. They are the most visible of the Kano requirements and likely easiest to acquire because customers freely talk about these. As seen in **Figure 2**, the better they are performed, the more satisfaction they bring, conversely, the worse they are performed, the more dissatisfaction they bring. Kano originally called these "One-Dimensional" because they are linear in nature, the better you execute these, the more satisfaction from the customer you get. *Examples of this type of*

quality are the battery life on a cell phone or the time it takes to get an oil change at your dealership or the resolution in your new flat screen TV. The better they are executed, the more satisfaction you receive.
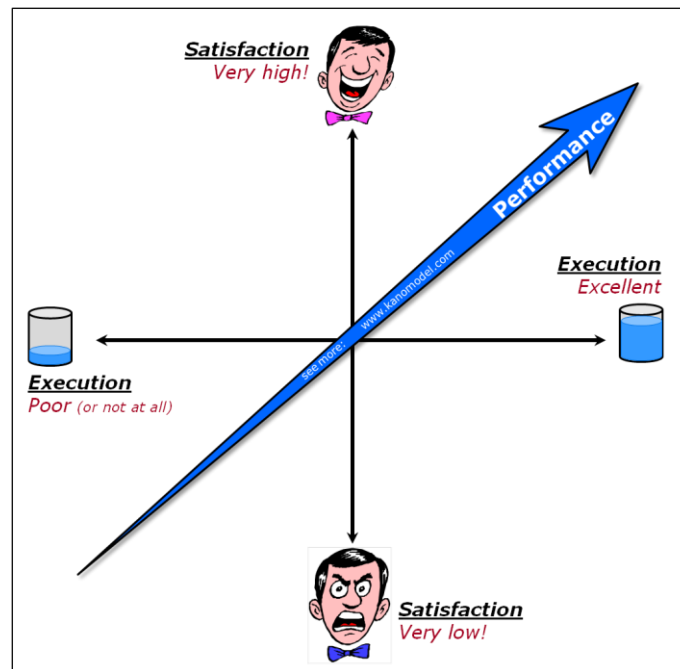
b. **Basic** – As shown in **Figure 3**, these are the requirements that the customers expect and are taken for granted. When done well, customers are just neutral, but when done poorly, customers are very dissatisfied. Kano originally called these "Must-be's" because they are the requirements that must be included and are the price of entry into a market. *Examples of this type of quality is the strength of the handle on your favorite coffee cup, the cleanliness of the carpet in a hotel room or the reliability of a lock on the door of the new car you are considering to purchase. If these are done extremely well, it does very little to enhance your satisfaction, you typically remain neutral.*
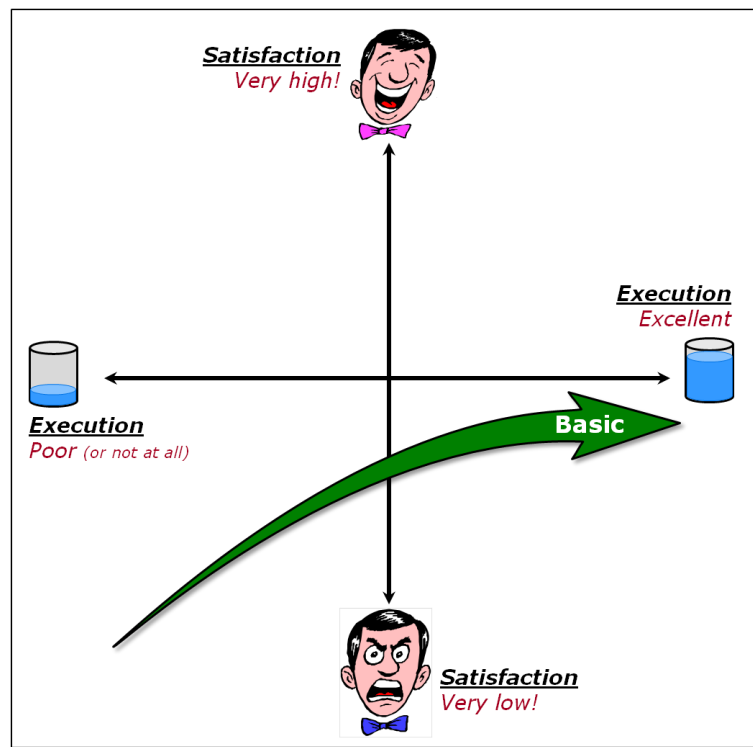
Figure 3

c. **Excitement** – As arguably one of the most important of the categories, these are the requirements that are unexpected pleasant surprises or delights. These are the innovations you bring into your offering. Some companies call them USP's (Unique Selling Propositions) As shown in **Figure 4**, they delight the customer when there, but do not cause any dissatisfaction when missing because the customer never expected them in the first place. Kano originally called these "Attractive or Delighters" because that's exactly what they are and do. *Examples of this type of quality is Zappo's with their free shipping both ways and Nest's thermostat that programs itself. Nest also came out with a smoke detector that can be silenced with a simple wave of the hand instead of finding a ladder and pushing a button that doesn't work or having to find and disconnect the battery that often ends up with a broken smoke detector, not sure about you, but I've done this.* Excitement Quality doesn't have to be expensive. Have you ever pulled into a gas station only to realize the fuel filler door is on the other side of the car? Back in the late 80's Ford put a little arrow next to the fuel icon on the dashboard to remind people what side of the car the fuel door is. Cost, about 1/100 penny per car. If that. It was a very inexpensive solution to a customer pain and such a good idea that all cars do it now. On the other hand, if it is a big innovation, customers will be very willing to pay more for big innovations.
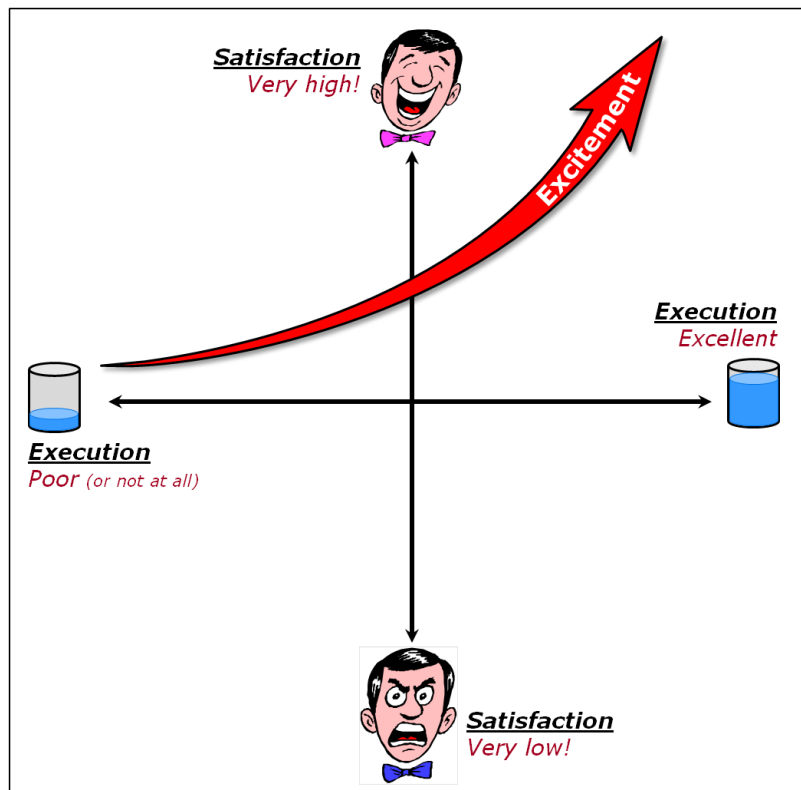
Figure 4

d. **Indifferent** – As seen in **Figure 5**, these are the requirements that most customers simply don't care about whether they are present or absent, their satisfaction remains neutral under either circumstance. *Examples of this type of quality are some of the advanced features on a cell phone that only one in every hundred people would ever use. If the vast majority of customers don't care about these functions or features and they are expensive to include you may want to consider eliminating them in your offering because they provide so little value.*
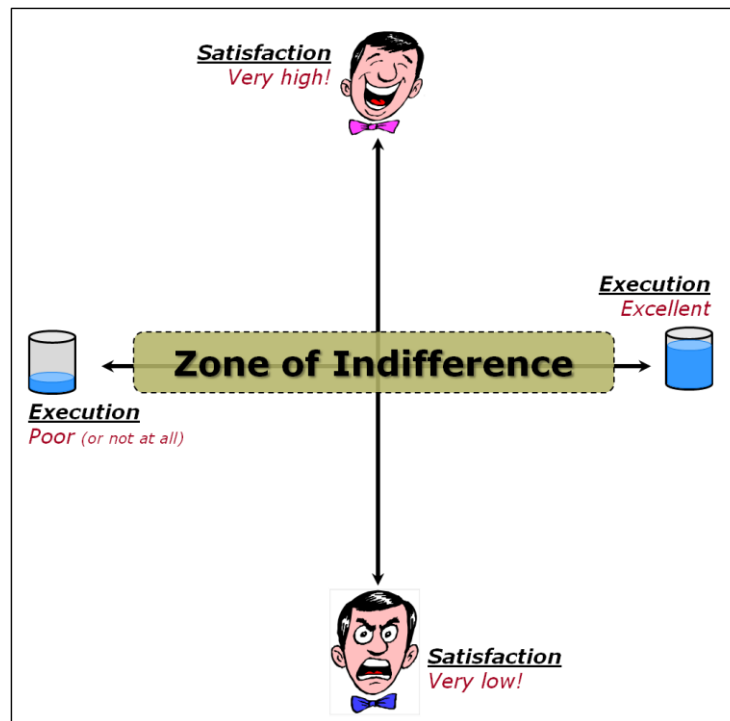
Figure 5

a) **Reverse** – Likely the rarest of the 5 categories, and items you want to exclude from your offering. T hese are the requirements that cause dissatisfaction when present and satisfaction when absent. They are the features or attributes that cause customers to say "I hate when they do that". Although very rare, they do sometimes find themselves in a product or service. *A small examples of this type of quality was Microsoft's little "paperclip helper". Most people didn't like it and it was even more annoying because it was difficult to turn off unless you knew the secret to disabling it.*
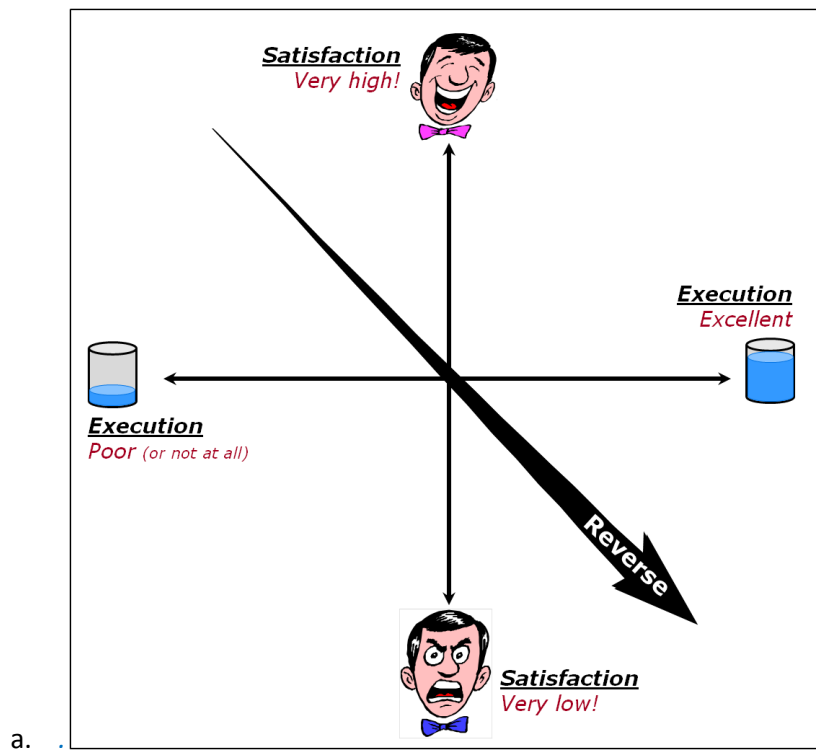
Figure 6

Important note: There are shades of grey between categories. It's important to keep in mind that there are no absolutes with the Kano Model. What one describes as an Excitement Quality will be described as a Performance Quality by others. Don't be over analytical with the model, the masses don't always think alike. What is expected (Basic) by one person may be an Excitement to another person. These differences are often attributed to customer segmentation and the simple fact that all customers are a little different and have different priorities.

(2) Time has a big influence on any Excitement Quality

One of the unfortunate characteristics of Excitement Quality is how long it will last. Generally speaking, what is exciting today will be asked for tomorrow (Performance Qualities) and expected the next day (Basic Qualities). Figure 7 shows how Excitement quality transitions over time. The reality of this transition means you must continually bring in new Innovations (Excitement Quality) to keep your offering fresh, unique, and competitive. *There are a thousand of examples of this phenomenon including heat in a car, wireless internet in a hotel, cameras in cell phones, and remote*

controls for your TV. Innovations only last so long until the customers start requesting these features or the competition copies them and eventually they becomes the standard.
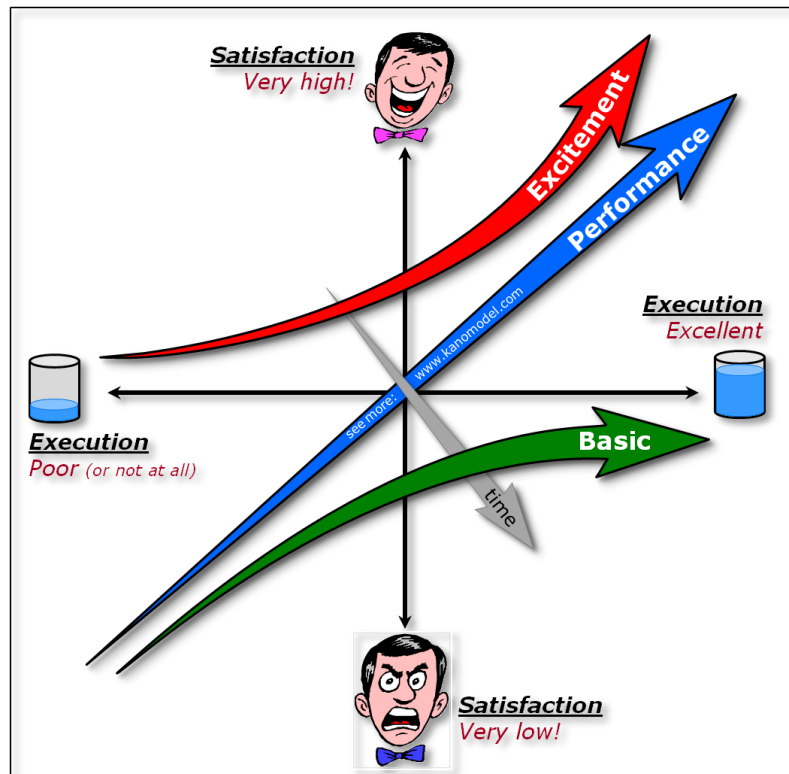

Figure 7

(3) A special survey can be designed and administered to determine which Kano category your requirements (or features) fall into

Imagine being able to predict which of the 5 categories each of your customers requirements falls into. There is a process called the Kano Survey that uses two questions for each requirement to determine what category the requirement/feature falls into. It can be designed and used to categorize all the requirements. In this survey, you formulate two strategic questions, a functional and dysfunctional representation of the requirement. Depending on how the respondents answer the question, the results will be aggregated and compiled into a graph which clearly shows you which category the requirement/feature falls into. Using this information along with some other voice of customer data, the development team can find gaps in their offering and potential holes in their customer research. Understanding how the list of requirements fits into the Kano Model can also help a development team determine which of the requirements or features to include, which need enhancement, which need cost reduction, which should be excluded, and which to simply leave alone. Find more detail on the Kano Survey **here**.

Figure 8

(4) A few well executed Innovations (Excitement Qualities) can make up for weaknesses in the other Kano categories.

Have you ever heard the phrase, "For every argument, there is an equal and opposite argument that makes the same amount of sense?" I could easily argue that Kano's Basic Needs are the most important category because they are they represent the "Must-Be's" or threshold requirements that need to be in your offering for anyone even to consider it. Here is an opposite argument that makes sense as well; Excitement Needs are the most important category because they differentiate your offering from your competitors and give customers a reason to select your offering when they have so many choices. Since no one wants to compete on price, when done well, Excitement Needs often solve this problem by allowing much higher margins because the customers are willing to pay for new features or functions that add value. The truth of the matter is that all 3 Kano categories (Basic, Performance, and Excitement) are critical to the success and profits of your offering. Some of the most profitable products and services have either created a perfect balance of the requirements or strategically included one or more Excitement Qualities that sometimes trump or forgive a weakness in some Performance or even a Basic need. Example: Google Drive documents not being able to save instantaneously when not connected to the cloud. Fast saving is a Basic for most, but tolerated with Google Drive documents because of all the other great benefits, especially having only one shared. Careful detail must be paid attention to make sure you uncover and execute on the right set of needs from all three Kano categories. Missing important requirements from any of the categories any may greatly endanger the success of your offering.

(5) Knowing Kano's categories is only half the battle

Kano did an excellent job describing the 5 classifications of customer needs and how they influence satisfaction but one thing that Dr. Kano did not talk about much is exactly how to get the requirements in each of the 3 main categories; Performance, Basic, and Excitement. Knowing WHAT the categories are is the easy part and only half the battle, knowing HOW to gather them is the other half. Fortunately, there are many very well documented methods to get at the Basic and Performance Requirements as shown below:

- **Basic Needs** *(sources):* Your experience, customer complaints, competitive similarities, industry standards, government regulations, function analysis, and FMEA (Failure Modes and Effects Analysis).
- **Performance Needs** *(sources):* Classic VOC methods including customer Interviews, observational research (ethnography), conversations, surveys, focus groups, contextual inquiry, etc.

Excitement Quality, however, is a little more challenging for most organizations since you can rarely count on your customers to tell you where or how to innovate. So if this is true, how can you come up with the great ideas for the Excitement Quality? We have devoted the last 15+ years researching and developing practical approaches for Innovation and Inventive Thinking, the HOW behind Kano's Excitement Quality.

Figure 9

There are several compelling and practical methods being used to help teams and organization come up with Innovations (Excitement Qualities). Click **here** to learn much more about an 8-Step process we call Systematic Innovation, it is a framework of integrated best practices to develop new value and innovations for your customers. You will see that the Kano Model is used in Step 1, (Voice of the Customer) and in step 4, (Concept Generation) we introduce over 36 methods to get at new Innovations, Kano's Excitement Quality.

Questions can be forwarded to info@kanomodel.com