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Brief Review: Kano Model in Healthcare

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Abstract:

In this brief review, we discuss the use of the Kano Model in the hypothetical example of a re-design of resident conference experience. Kano appreciated that there were a number of attributes to quality. These are discussed in this brief review.

Introduction:

There was a period prior to formal research into quality when the overarching notion in quality assessment was that there were things to do---and the more the better. And things to avoid---and the less the better. In the 1980s, Dr. Noriaki Kano challenged that notion and created what is now known as the Kano Model. All of this may sound to healthcare providers as rather tangential. But if we consider a rather practical question---a hypothetical question of how best to design resident conference schedules and the conference experience---if can become quite interesting.

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References:

Available on request

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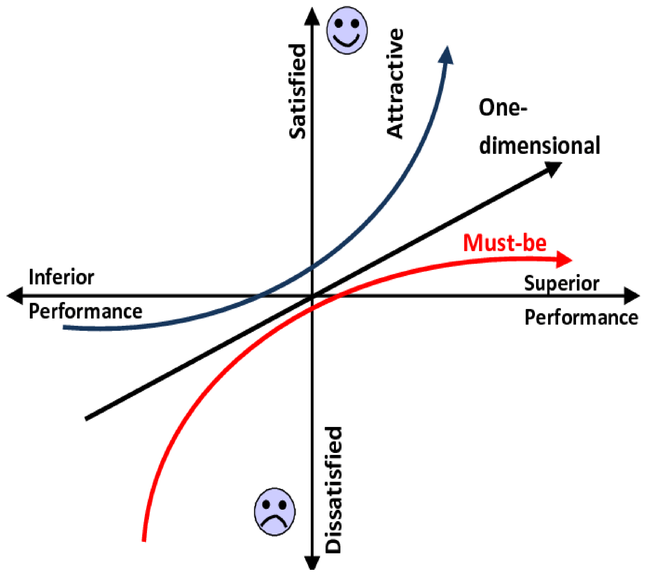

The three desirable Kano attributes shows as Kano Curves (bing.com)

Discussion:

What professor Kano noted is that not all dimensions of a design are equal. They are not all linear (more of the good or bad, less of the good or bad). He felt that there were five essential kinds of features.
Two things to avoid:
Indifferent quality:
The first element from a common-sense point of view are things that we do, or might do that make no difference to the customer. We might survey residents and find that provided coffee at a conference makes no difference—residents may bring there own or the cafeteria may be next door.
Reverse quality:
These are things that may seem intuitive but can be actually annoying. We might find that provided extensive reading lists prior to a conference may be a negative. Or that pre and post tests designed to support learning are annoying and burdensome.
Three things to understand in order to design into the service:

Discussion:

Must-Be Quality
In our hypothetical example, must be quality would be things that the resident expects on conference day and are taken as an expectation. A comfortable room. AV equipment that works properly. Enough seats. Presenters that are there on time. When done poorly, such elements would be distressing.
One dimensional quality:
In our hypothetical, these would be things that result in resident satisfaction when fulfilled and in dissatisfaction when not fulfilled. The sharing of information that is new to the resident and not impractical or overly theoretical might be an example.
Attractive quality:
These are extra stuff that provide satisfaction, even delight, when fulfilled but do NOT cause dissatisfaction when not present. High tech visualizations during a lecture might be an example.
How do we learn about this attributes?
Kano proposed a standardized survey that attempted to sort out these attributes. Such surveys have been customized and re-theorized----but the essential concept is that the questions are not standard one to five “agree or disagree” questions. They include responses like
I like it
I expect it
I am neutral
I can tolerate it
I dislike it.
Answers drive the categories
The point of the Kano model:
Use of the Kano model may allow for better use of resources. If coffee at the start of conference makes not difference—why invest? If extensive prework packages are annoying—why do it?
Kano Curves:
As opposed to liner more good, less bad (or the reverse), the Kano approach sees curves. In fact—a family of curves to be understood.

Conclusions:

The Kano Model may have exciting implications in may healthcare applications—including not only the satisfaction of patients but also the satisfaction of a wide range of customer-providers within a system.