Customer Defined Attributes:
The Kano Model

Not all Product/Service Attributes Equal

All customer requirements are not created equal. It is worthwhile to discover which attributes of a product or service are more important to the customer. And, product/service attributes behave differently in terms of how they affect customer satisfaction. It is important to understand both dimensions –relative importance and correlation with satisfaction—to deliver the bundle of attributes that will attract customers to your brand.

The character and importance of each attribute also may vary for different market segments. Competitors are always updating products and adding new features. And customers' needs change over time. This means that finding the best fit between a product/service's optimal mix of attributes and customer preferences is an iterative process that should be updated on a regular basis.

Three Types of Attributes

There are three types of relationships between product/service attributes and the levels of customer satisfaction they can generate:

- Basic or "must have" attributes: Expected by customers. Your product may be eliminated from consideration if it doesn't have an acceptable level of this attribute. E.g. Drivers–side Air Bags in a car.

- Discriminator or "linear satisfier" attributes: All other things being equal, more of this attribute increases customer satisfaction. E.g. Fuel Efficiency on a car.

- Energizer or "delighter" attributes. Not expected or required, but creates customer satisfaction when present and can make the difference in brand choice for a consumer. E.g. In–dash GPS system on a new car.

Understanding the character and relative importance of each attribute/feature of your product/service will guide the important design and marketing decisions required in today's dynamic and competitive markets. It is particularly critical when building and launching new products and services.

Contents

Special points of interest

- All customer requirements are not created equal in terms of how they correlate with customer satisfaction.

- Types of Attributes:
    1. Basic—"Must Haves"
    2. Discriminators—"Linear Satisfiers"
    3. Energizers—"Delighters"

- The character of an attribute can change over time.

- And, it can vary by market segment.

The Kano Model

Noriaki Kano set out to measure the correlation between two aspects of product quality: 1. an objective assessment represented by "Fulfillment level" in this chart. Kano defined this as "conformance to requirements"; and 2. a subjective assessment of quality represented by "Customer Satisfaction". In the process he found three distinctly different types of correlation between these two variables:

- Delighters— Bonus features are represented as a concave relationship with Customer Satisfaction. Customer satisfaction increases logarithmically with Fulfillment level on these attributes.

- Linear Satisfiers represented as a straight line. Fulfillment and satisfaction are linearly correlated.

- Must-Haves are represented by the lower convex curve in the model. If your product does not have these attributes it may lose out to competitors.

A general guideline for new product/service development is to fulfill all Must-Have requirements, be competitive on the Satisfiers, and include some differentiating Delighters. And over time attributes that are delighters one year may become Must-Haves the next.
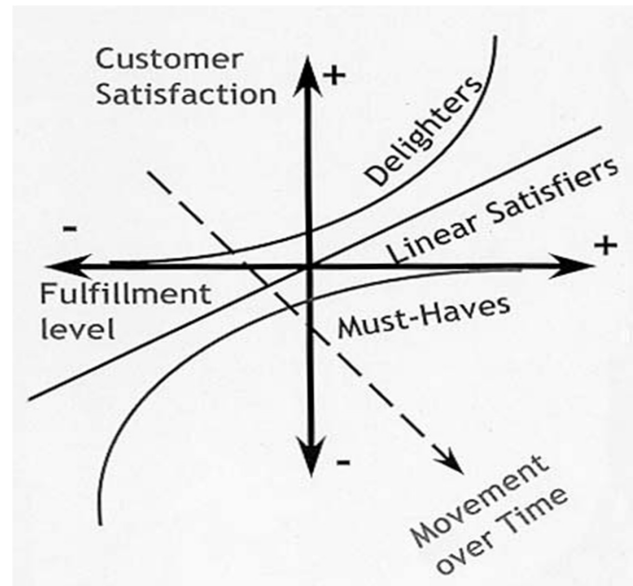
"I am absolutely convinced that characterizing the customer requirements into Kano's categories is very valuable. Design is a trade-off activity," Gary Burchill, leading contributor in the development of Concept Engineering

References

"Attractive Quality and Must-be Quality" Noriaki Kano, Quality JSQC, Vol. 14, No.2, October 1984. The original article from Kano.

"Discover Your Products' Hidden Potential" Ian MacMillan and Rita McGrath, Harvard Business Review, May-June 1996. MacMillan and McGrath developed their own language for the same concepts and illustrate how they apply in the business world.

"Special Issue on Kano's Methods for Understanding Customer Defined Quality" Center For Quality Management Journal, Vol. 2, No 4, Fall 1993. A how-to guide for anyone who wants to apply these concepts to your own product/service. Contains advice on how to assess product attributes using the Kano model, including specific questions for measurement and analyses to categorize customer requirements and product attributes.

This article describes how to apply the Kano specifically to services. "Integrating SERVQUAL and Kano's model into QFD for service excellence development" Kay C.Tan and Theresia A. Pawitra, Managing Service Quality, 2001. Vol. 11, No. 6.

Notes: