

By Bopdeb Mondal

Six Sigma practitioners capture the voice of customer (VOC) in the process of designing or improving a product or service; however, practitioners often compromise while implementing the VOC in the actual design, citing reasons such as cost, cycle time and design constraints. As a result of these compromises, products or services can lose competitiveness in the market.

Dr. C.K. Prahalad and M.S. Krishnan's two innovation principles, detailed in *The New Age of Innovation* (McGraw-Hill, 2008) can help practitioners to overcome constraints in responding to the VOC and delivering value without compromise. By applying Lean Six Sigma with the innovation strategies, an organization can improve the competitive positioning of a product or service in the market. Through a case study from a city-based restaurant, practitioners can see the possibilities for turning around a business by using these two complementary principles in combination with Lean Six Sigma.

### **The Innovation Theory**

Dr. C.K. Prahalad and M.S. Krishnan's innovation theory revolves around two principles: N = 1 and R = G.

- N = 1 states that "value is based on unique, personalized experiences of consumers." This means that even if the organization is serving millions of customers, the focus should be on individuals.
- R = G recognizes that it is difficult for an organization to satisfy the varied expectations of so many customers, and therefore the business must diversify how it operates. "All firms will access resources from a wide variety of other big and small firms – a global ecosystem."

### **Identifying the Scope for Improvement**

The value stream is made up of the entire series of processes that transform inputs into an output that satisfies the customer's needs. To identify the key value streams, practitioners normally do a strategic position analysis of the products or services of the organization. This analysis is done by plotting a product or service against its competitive position in the market and the profitability of the market where it operates. Practitioners also consider how much revenue is being generated by the respective product or service. The strategic position analysis may give one of the following areas of improvement:

- Sell or shut down value streams
- Invest in the product and undertake a major initiative to improve the position of the value stream
- Monitor the value streams for any weakening of their competitive position in the market segment

If the product or service is in a profitable market but unable to survive the competition, it is not creating value for the shareholders. The first step to pushing these value streams toward profitability and competitiveness is to understand and analyze the VOC in detail.

To do this, practitioners should first step into the user's shoes and imagine what joy the offering will bring if the customer's requirements are satisfied without any degradation. They should treat the users individually and think innovatively on how it may be possible to satisfy these requirements. This is the point where the innovation principles can be used to overcome constraints in responding to the VOC. N = 1 helps practitioners to understand the behavior, needs and skills of individual customers. R = G helps to take an approach of creating an ecosystem to satisfy customer's need. The shift in mindset is from "one organization focuses on aggregate customer needs" to "multiple suppliers address individual customer needs." This genuine effort toward creating value for the customer makes the product or service competitive in the market.

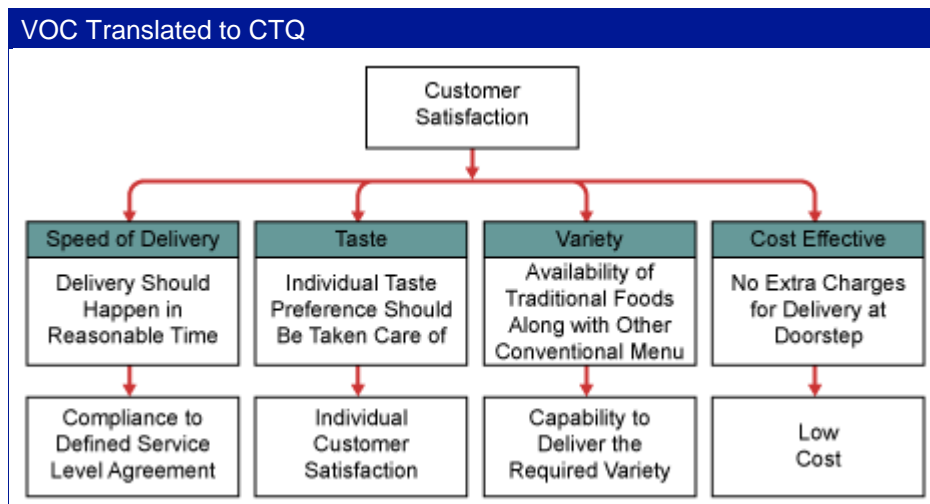
## Case Study: Restaurant Transforms Business Using Innovation

A city-based group of restaurants started business a couple of years ago. They have a delivery facility in addition to many outlets in the city. The restaurants specialize in traditional foods from one part of the country. Their customers visit the restaurant quite frequently, but are from different parts of the country. The business has seen a growth of 20 percent to 30 percent year over year, and the managers are planning to double the growth in the next two years.

The managers started collecting customer feedback on every service it offered. They received some thought-provoking feedback from the survey:

- The customers from other parts of the country expect food that they term “traditional” in their region.
- The delivery service is not prompt and often failed to meet the committed lead time.
- Costly food with extra charges for home delivery forces the customer to think twice before placing an order.
- The typical taste preference given by customers is not adhered to while ordering for delivery.

The restaurant managers translated the VOC feedback into critical-to-quality (CTQ) demands, shown in the figure below.



### The Challenges

The restaurant managers understood that there was a significant gap between the strategic intent and the capacity to act. Some of the challenges they listed:

- The delivery service is a profitable market but their positioning is not competitive.
- If they want to add traditional food for different regions then the number of varieties will be difficult to handle. They have neither the capacity nor the competency to deliver this large number of varieties.
- The user-specific taste preference adds to the complexity of offerings.
- The cost will go up as the complexity of offering increases.

### Action Planning

The managers, decided to grab this huge potential business, but they realized this kind of customized service could not be delivered with the conventional way of doing business. The solution to the problem was manifold:

- Collect the requirement from the customer and communicate the requirement to the food preparation department in real time.
- Outsource the varieties to the other vendors depending on their capacity and areas of expertise. Collaborate with the vendors in real time to deliver a specific variety.
- Execute the order and deliver in less than 30 minutes (the service level agreement for delivery).
- Make the revenue model work to generate positive economic profit.

The group launched a website that caters to all these requirements. The website gives an interface to the customer for placing orders, and includes menus, a rate card and options for taste preference. The offering is not a mass customization, however; any specific requirement other than the options can be communicated through the text field provided or over the phone with reference to the order number. The localities where delivery services are available are specified on the website, ensuring the exclusion of any areas where the service level agreement cannot be met. Orders are delivered from the nearest outlet in the city. The website is used to communicate requirements to the other outsourcing vendors. Advertising space from these vendors is available on the website, which earns them revenue. The website also is used to gather customer feedback.

### Key Learning

The restaurant managers used the resources within the supply chain to provide a personalized solution to the individual customer. They used the Internet to access customers and vendors in real time, and gave customers an opportunity to co-create the recipe (customers are allowed to specify the variety, taste and budget).

With the traditional Lean approach, the business could have only reduced the cycle time of the delivery by eliminating the non-value added activities. Through the use of Lean Six Sigma and innovation together, value for the customer has shifted from services and solutions to experiences, and the restaurant was able to generate additional revenue.

**About the Author:** ***Bopdeb Mondal** has more than 10 years of experience in manufacturing and software, and is currently employed with Tata Consultancy Services as an IT process transformation consultant. He has been the deployment lead in many quality and business excellence initiatives throughout his professional career. He is a Certified Six Sigma Black Belt from the American Society for Quality, a Certified Quality Manager from Indian Institute of Quality Management and an International Register for Certified Auditors-certified Lead Assessor (ISO 9001). He resides in Pune, India and can be reached at [bopdeb.mondal@tcs.com](mailto:bopdeb.mondal@tcs.com).*