

## **How does Modern QFD differ from Traditional 4-Phase QFD?**

### **Why is it important even for senior practitioners to start with the QFD Green Belt® course?**

- 1) Modern QFD should be custom tailored to each organization's unique culture and development process. Even companies in the same line of business may do QFD with different tools and sequence. There is no standard recipe. The 4-Phase model QFD was developed by the U.S. auto parts industry 25 years ago, and it was dubbed by its creators "kindergarten QFD" because its simplicity was meant to be a starting level, not a graduate course.
- 2) Traditional QFD often begins and ends with the House of Quality (HoQ). This table is one of the most error-prone and exhausting parts of QFD. HoQ, however, is only one of several tools that should be used, but due to poor practice, it often grows so large that it is never finished or no further downstream work follows. Modern QFD has made the HoQ an option, and replaced it with the Maximum Value table that deploys high value customer needs through the entire analysis, development, design, innovation, build, and delivery process - in a single document!
- 3) The math of QFD was developed back in the days when the Japanese used the abacus that uses ordinal scale integers from 1-5. Ordinal scales, however, should not be used for the addition, subtraction, multiplication, and division functions in QFD, only ratio scale numbers should be used. Results from using improper math have no meaning. Six Sigma practitioners should be especially mindful of this.
- 4) Modern QFD has a very strong set of voice of customer analysis tools to discover unspoken customer needs. In today's competitive environment, products and services quickly become commodities and sales go to the lowest price producer. To create high value and therefore high profit products, makers must go beyond the obvious requirements that commodities address, by understanding unspoken value propositions. Traditional QFD accepted whatever the customer asked for as their requirements set, and had no tools for further exploration.
- 5) Modern QFD addresses both the "use" functions and "esteem" functions identified by Larry Miles in Value Engineering, one of the key methods in QFD. In Modern QFD we call these quality deployment and lifestyle deployment. Lifestyle deployment is based on Kansei Engineering and is even being used in software and high tech industries to create better usability and comfort.
- 6) Traditional QFD assumed the availability of resources to complete a project, and did not address schedule or multiple project organizations. Modern QFD uses Speed Deployment to deliver products to customers faster, when this is a strong customer need.