The importance of new product development (NPD) for a company’s growth and prosperity is widely recognized. Faced with an increasingly volatile external environment characterized by shorter product life cycles, heightened local and global competition, maturing industries and flat markets, and a quickening pace of technological developments, many companies are in a position where NPD is no longer a strategic option but has become a strategic necessity.

According to managers and researchers, the benefit resulting from improving the early phases of New Product Development which typically precede the detailed design and development of a new product are likely to far exceed those that result from improvements aimed directly at the engineering design process.

Several critical success factors for these first stages of NPD have been identified in the literature. Detailed customer needs analysis is one of these critical factors. Capturing customer needs is crucial when producing high quality products. Quality Function Deployment (QFD) is a method for getting in touch with the customer and for using this knowledge to develop products which satisfy the customer.

Quality Function Deployment (QFD) was conceived in Japan in the late 1960s, during an era when Japanese industries broke away from their post-World War II mode of product development through imitation and copying and moved to product development based on originality. QFD came into being in this environment as a method or concept for new product development under the umbrella of Total Quality Control.

Today, QFD application goes beyond product and service design, although those activities comprise most applications of QFD. QFD has been extended to apply to any planning process where a team has decided to systematically prioritize possible responses to a given set of objectives.

I first came across QFD as a methodology in the mid-1990s. At that time, I had over 10 years’ engineering experience and was a university professor of Industrial Marketing. The matrix approach which characterizes QFD seemed like a great way to keep track of the multitude of requirements and relationships that drive design decisions during the course of product development. I think that QFD is a powerful tool for delivering a valuable product to customers and leading to significant improvements in product/process performances. It is a team-based system which means that team members work closely enough with one another to provide
accurate and useful appraisal information. This implies that not only the voice of the customer but also the voice of all firm’s different departments are taken into consideration.

The book provides a clear description of a comprehensive quality function deployment framework. The reader is guided on how to create the matrices through practical examples. Discussions are also provided on how to gather information on customer needs and how such information could be used in product or service design and helping a firm gain ground compared to its competitors.

These issues are addressed by the author in a systematic way and with a distinctly analytical approach, but always using accurate and understandable language.

The presentation is also accompanied by a considerable amount of explanatory examples, taken directly from experience gained in the field.

In this sense, the book is an example of a perfect blend of technical expertise and professional experience. Consultants, practitioners, engineers, and students will find this book a useful reference manual and a good introduction to quality management and to quality function deployment in general.

Padova, Italy, July 2014

Roberto Panizzolo
Practical Manual of Quality Function Deployment
Maritan, D.
2015, XIII, 190 p. 52 illus., Hardcover
ISBN: 978-3-319-08520-3