

The Thought Map

Revised

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Key Words: Thought Map, Process Improvement, Sampling, Statistical Process Control (SPC), Process Map, Critical Thinking, Parallel Paths of Work, Data Collection Strategies, Design of Experiments (DOE).

Abstract

Statistical techniques such as Design of Experiments (DOE) and Sampling, as well as many non-statistical quality tools, are instrumental in improving many processes and products. A potential weakness in the use of these methodologies is they are often placed within an artificial framework or roadmap commonly referred to as a “model for continuous process improvement”. These roadmaps are most often defined as sequential steps required to achieve improvements in process and product performance. The prescribed sequential steps of the defined improvement path create limitations in thoughts and work. Many questions, thoughts, and ideas are generated in a random or sporadic fashion. The tendency is to structure these thoughts in a sequential framework. However, the very essence of parallel thinking and learning is a critical asset in identifying the key areas associated with the necessary work to improve processes and products. The thought map is invaluable in any focused work effort in order to capture the multitude of questions that arise and the many possible paths that need to be considered to improve understanding of the situation. The thought map should link the hypotheses stated to the data acquisition strategies, and ultimately to the solutions implemented.