Guidebook for Six Sigma Implementation with Real Time Applications

Published by
INDIAN STATISTICAL INSTITUTE
&
QUALITY COUNCIL OF INDIA

Now available !!!

Editorial Committee
Chairman: Dr. Sankar Kumar Pal
Advisor: Girdhar J. Gyani
Principal Editor: A K Chaudhuri
Associate Editors: P K Perumallu, U H Acharya, A Roy Chowdhury, and K K Chowdhury

Now available !!!
“.......It is a dream come true situation!! The dream of compiling select case studies on Six sigma implementation and bringing out a volume, has been finally realised!!

It gives us immense pleasure to place this volume of case studies in your hands today. Exclusive chapters on guide to six sigma implementation, has been specially written by Professor A K Chaudhuri- the Champion of Champions of Six Sigma......”
Message from Dr. Sankar Kumar Pal
Director, Indian Statistical Institute

Preface by Mr. Girdhar J. Gyani, Secretary General, Quality Council of India

What’s in a name?-Quality Management in 1990’s and thereafter

Implementing Six sigma initiative in an organization

Six sigma project selection strategies

Generally what you require to for working in a Six sigma project

Case Studies aim at improving business goals as well as customer satisfaction

18 Case studies

Bulk manufacturing process- 6

Discrete manufacturing process- 6

DFSS Case study -1

Total manufacturing process oriented case studies -13

IT/ITES sector oriented case studies -3

Service function oriented case studies -2
“Establishment of the critical business issues for the total business or for SBUs, if issues are different for different SBUs can be done on the basis of causal analysis. An approach of TREE/MATRIX DIAGRAM based on Quality Function Deployment (QFD) principles could be beneficial in pinpointing the control subjects easily. Control subjects could be SBUs in the first iteration. Relationship scores are put on the basis of resident knowledge with the process management team. Second iteration could be with a purpose of aligning the connected processes with critical areas in a particular SBU.

.Both the iterations are shown below with the legends”

“......The third phase of the DMAIC process. During this phase, data is collected and analyzed, and sources of variation are identified. Root causes are generally get established in this phase.

• Steps followed here usually as given below:
• Process analysis – activity flow chart – value added and non – value added activities.
• Deployment flow chart (where it involves other departments)
• Prepare Tree Diagram or Cause and effect diagram / fish bone diagram –through brain storming for each CTC/CTB/CTQ.
• Prepare a cause validation plan. How you will validate the causes identified in Cause –Effect or Tree Diagram?
• Do validation of the causes as per the plan through Gemba investigation – data analysis (hypothesis testing, analysis of variance, regression analysis, exploratory data analysis etc
• Mostly for manufacturing/Product design processes design of experiments could provide much inside into the processes/ technology.
• List out the root causes.”

“Now the key question is “How do we implement a system so that use of Six Sigma Methodology gets integrated with a company’s working ethos? The way it is being implemented in some of the organizations, it looks like structure and formats of so called Six Sigma implementation is getting precedence over the core essence of it. One says “If Black Belts are not full time- they should not be termed as Black Belts”, the other says “Oh! You have not validated distributional assumptions of residuals or you have used Taguchi Methods that’s not the proper use of Six Sigma Methodology”. We create our own realm of understanding based on our resident knowledge and “tell that’s it “, of course the result is a chaos.”
For ordering write today!!!

Head, SQC & OR Unit, Indian Statistical Institute, 8th Mile Mysore Road, Bangalore 560 059, India

Or
Fax at +91-80-28484910/28484265

Or
E-mail at pkumari90@yahoo.com or akcisi@yahoo.co.uk

Rs. 650/- including postage for Member organizations and Educational institutions
RS.850/- including postage for Non-member organizations
US Dollar 100/- including postage for overseas individuals/organizations

• Bulk orders more than 10 get special discount of 10%