DMAIC-Roadmap

(focus of tools: production processes)

Project Management

Phase	Objective	Main Tasks	Tools	Results
Define 	- Define improvement project	 Describe current situation Generate process overview Explore customers and their requirements Define project 	SIPOC-Model Action Date Project Plan Define Measure ANALYZE IMPROVE CONTROL	Overview of the situation to be improvedClearly defined customer requirementsProject assignment
Measure	- Determine the actual status	 Detail process flow Assure measurement system capability Interpret available data Acquire and analyse data Identify process capability 	Measurement System Analysis LSL USL Larget Pareto Analysis LSL USL USL Larget	- Understanding of the situation based on facts an figures
Analyze	- Identify relevant causes	Identify main influencing variablesQuantify cause and effect correlation	Cause & Effect Analysis Correlation & Regression Design of Experiments (DoE)	- Proven interrelationship of cause and effect
Improve	- Develop and verify solution	 Develop potential solutions Evaluate solutions and select solution Test selected solution and prove effectiveness Plan implementation 	Robust Design Creativity Techniques FMEA S O D RPN Action 9 8 3 216 name / wkX 9 2 2 (36) name / wkX	- Optimised and tested solution - Release for implementation
Control	Implement optimised solution and secure sustainability	Embed solution within the organisational structureSecure improvement sustainablyClose project	Process Flow Statistical Process Control Training	 Improved status sustainably secured and accepted by process owner Improvements and savings evaluated Formal project closure



