

# sigmaGuide

**software guide for Six Sigma projects: download, installation and content**

Copyright  
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## ***Please download sigmaGuide and ...***

### **sigmaGuide is a copy-protected Excel file for:**

- Business-Projects: sigmaGuide.exe
- Standard-Project: sigmaGuide\_Standard-Project\_Environmental-Littering.exe

### **Download sigmaGuide at:**

- <http://www.sigmaLogic.de> or
- follow the link below the video on edX.org

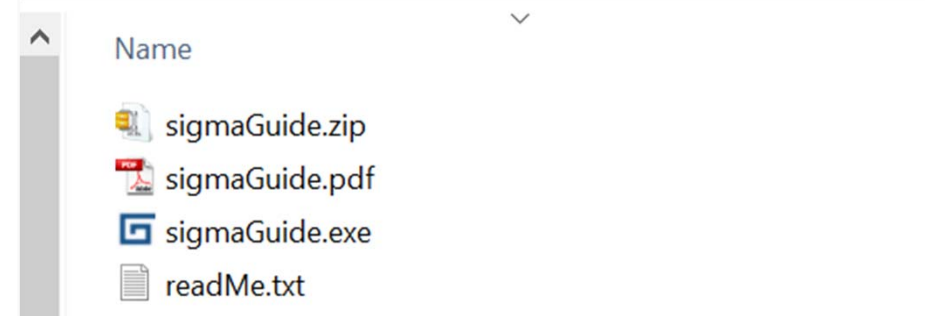
### **Unzip, execute and save the files:**

- In an empty folder of your local hard drive
- **Not** on a network drive or in the cloud

### **Requirement:**

- Windows 7 or later
- Excel 2010 or later

Software > sigmaGuide > \_my\_GB\_Certification\_Business-Project >



Software > sigmaGuide > \_my\_GB\_Certification\_Standard-Project >



***... unzip, execute and save all files in an empty folder of your local hard disk***

## *sigmaGuide is a software guide for Six Sigma projects, ...*

Phase	Tool	Purpose	
	<a href="#">Summary &amp; Focus</a>	Summary of the purpose and focus of the tools in sigmaGuide	
Define	<b>Part 1</b>	<b>Identify a topic for a Six Sigma project</b>	
	<a href="#">Project-Topic</a>	Identify Problems of the daily work as a potential for Improvement	
	<b>Part 2</b>	<b>Define a Six Sigma project</b>	
	<a href="#">Process &amp; Output</a>	Describe the Process and its Output	
	<a href="#">Problem</a>	Describe the Problem	
	<a href="#">Effect</a>	Describe the Effect of the Problem	
	<a href="#">Solution</a>	Outline Solution-Ideas - if already available	
	<a href="#">Project-Definition</a>	Summary: Process, Output, Problem and Effect	
	Define	<b>Part 3</b>	<b>Implement a Six Sigma project</b>
		<a href="#">SIPOC</a>	Structure the Process in its important steps, with related Supplier, Inputs and Outputs and Customer
<a href="#">Voice to Critical</a>		Identify Voice of Business/ Customer (VoC/ VoB), Critical Business/ Customer Requirements (CCR/ CBR), Problems and CIQ's	
<a href="#">Voice to Critical (Summary)</a>		Summary: VoC, VoB, CCR, CBR, Problems and CIQ's	
Chart: Y CIQs Bar-Chart		Problems and their Severity	
Chart: Y CTQ Kano		Fulfillment of requirements resulting satisfaction according to Kano-characteristics	
<a href="#">Project-Charter</a>		Complete and sign the Project-Charter	
<a href="#">Stakeholder-Communication</a>		Identify the Stakeholder and develop a Communication-Plan	
Chart: Stakeholder		Power and interest of and influence on stakeholders	
Measure		<a href="#">Input-Analysis</a>	Describe Inputs (xI) of the Process, Requirements on the Inputs and Deficiencies
	Chart: Influence of xI	Display: Strength of negative Influences of the Inputs (xI) on the Outputs (Y)	
	<a href="#">Process-Mapping and -Analysis</a>	Describe Activities of the Process (xP), related Inputs (xI) and Outputs (Y) and negative Influences	
	Chart: Influence of xP	Display: Strength of negative Influences of the Activities (xP) on the Outputs (Y)	
	<a href="#">C&amp;E Matrix xY</a>	Evaluate relationships between negative Influences of the Inputs (xI) and the Activities of the Process (xP) on the Outputs (Y)	
	<a href="#">Chart: C&amp;E Heatmap</a>	Display: Risks of the Influences from Inputs (xI) and Activities (xP) on the Outputs (Y)	
	<a href="#">Data-Collection-Plan</a>	Operationalise Measurands of Inputs (xI), Activities (xP) and Outputs (Y); Recommendation for appropriate: Charts, Parameter, Process-Capability-Indices, Control-Charts, One-Sample-Tests	
	<a href="#">Hypotheses</a>	Overview of all automatically generated Hypotheses, prioritized by their Risk; Recommendation for appropriate statistical Tests	
<a href="#">Hypotheses (Templates)</a>	Templates to summarize the C&E Heatmap and to formulate additional Hypotheses		
Analyse	<a href="#">Process-Capability</a>	Calculate Process-Capability (Yield, DPMO, Pp/ Ppk, Sigma-Level, ...)	
Improve	<a href="#">Solutions</a>	Develop Solutions to eliminate, adjust or circumvent the Root-Causes	
	Chart: Solution-Selection	Overview to Efforts, Benefits and Effect of Solutions	
	<a href="#">Action-Plan</a>	Specify Measures to implement the Solution-Ideas	
	<a href="#">FMEA</a>	Analyse the Risks of Measures (FMEA:= Failure Mode and Effects Analysis)	
Control	<a href="#">Process-Capability</a>	Calculate Process-Capability (Yield, DPMO, Pp/ Ppk, Sigma-Level, ...)	
	<a href="#">Process-Management-Plan</a>	Define measures to sustainably maintain the process-improvements	
	<a href="#">Summary and Benefits</a>	Summarize the results of the phases and demonstrate the financial and other benefits of the project	
General	<a href="#">Lessons Learned</a>	Summarize lessons learned and identify topics for future projects	
	<a href="#">Belt Checklist and Evaluation</a>	Project tasks that must be completed for certification and their evaluation by the Master Black Belt	
	<a href="#">Sponsor Checklist</a>	Tips and Tasks for the Sponsor	

### To shift cell contents:

- To shift cell contents please never use: Cut and Paste. Please use: Copy & Paste and then Delete unnecessary cell-contents. Otherwise cell-references will be lost.

### To exit sigmaGuide:

- Save
- Save as ...  
(increasing version number of your project, e.g. sigmaGuide\_myProject\_01 ...)

### Problems? Contact:

- reiner.hutwelker@sigmaLogic.de

***... leading you from the identification of a topic to the monitoring of implemented measures***

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### Part 1 Identify a topic for a Six Sigma project

Initially a suitable potential for improvement will be identified, i.e. a weakness in the daily work.

To do so a Product/ Service, its Problem and its Effect is described.

One indicator shows, how suitable the topic for Six Sigma is. Another indicator shows the relevance of the topic for the company.

This part is aimed to all employees of the company, to involve them without prior knowledge about Six Sigma into your improvement program.

### Part 2 Define a Six Sigma project

Based on the identified improvement potential, the topic is defined as a Six Sigma project.

To do so the Product/ Service and its Problem is specified, its underlying Process, its Input and Output. The available Solution ideas are collected.

The Quality, Availability and Consumption of the Products/ Services are evaluated as well as their Effects on the customer and the business.

This section is aimed at employees with Six Sigma knowledge.

### Part 3 Implement a Six Sigma project

The defined Six Sigma project is structured and implemented along the DMAIC phases.

From the SIPOC up to the Process-Management-Plan all important tools of the DMAIC are interlinked to a continuous project guideline.

Each tool of the guideline asks for the necessary information, integrates and prioritizes these information and transfers it to the next tool.

This part is for Green-Belts and Black-Belts.

**To shift cell-contents please never use: Cut and Paste. Please use: Copy and Paste and then Delete unnecessary cell-contents. Otherwise cell-references will be lost.  
To quit sigmaGuide please always: "save" and then: "save under" a different name, e.g. with increasing version-number.**

## Many tools guide you by a controlled dialogue:

1. sigmaGuide asks you a question
2. You enter the required information
3. sigmaGuide presents you a summary of your information in a statement
4. You check if the statement summarizes your information in a meaningful way
5. If yes - great
6. If not, please adjust your answers so that the statement makes sense.

*... leading you from the identification of a topic to the monitoring of implemented measures*

## *sigmaGuide is a software guide for Six Sigma projects, ...*

Summary & Focus	S (Solutions for Causes)	X (Influences/ Causes)	Y (Problems)	Z (Effect of Problems)	Project Management
<b>Project-Topic</b> Identify a Project-Topic, check it for its Six Sigma suitability, show it to a potential Sponsor and ask for support.			Y	Z	
<b>Project-Definition</b> Identify the underlying Process, its Output, its Problems, their Effects and any existing Solutions. The information is summarized in a Project-Definition. It should be evaluated by the Sponsor/ Master-Black-Belt.	S	X	Y	Z	
<b>SIPOC</b> The field of the Project is structured into the important Process-Steps, from the first Input to the last Output. All subsequent tools are based on these Inputs and Outputs. Keep the SIPOC up-to-date during the project.		X	Y		
<b>Voice-to-Critical</b> - SIPOC outputs are linked to Voice-of-Customer (VoC) and Voice-of-Business (VoB), - the Critical-Customer-Requirements (CCR) and the Critical-Business-Requirements (CBR) are inquired, - assigned to a Requirement category (Quality, Availability, Consumption), - the degree of their fulfillment is assessed and weighed by the criteria of the KANO-Model and - deviations from the Requirements are described as Problems. This results in a ranking order of the Outputs, their Requirements and Problems. The ranking starts with the critical Outcome variables Y, i.e. the Critical-to-Quality (CtQ). The Chart Y CTQ shows the severity of the problems in a bar chart. The Chart Y CTQ Kano shows the severity of the problems related to the Kano characteristics.			Y		
<b>Project-Charter</b> - summarize the important information about the Process, its Problems and Business Relevance and - supplemented by information about the scope, targets, dates and Roles. Thus the mandate for the Six Sigma Project is defined.	S	X	Y	Z	PM

- All tools of sigmaGuide are briefly described in the summary.
- The focus of each tool is indicated by the corresponding variables and their labels.
- Each of the following spreadsheets contains one of these tools and a description of its application.

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