

# Six Sigma DMAIC Methodology (4/4)

## SIPOC - Objectives



This is the last issue of a series of four in which the KORN CONSULT GROUP introduces its Six Sigma DMAIC Methodology.

Today we are pleased to talk to you about “SIPOC – Objectives”.

Please click on the links to see parts 1 to 3 in case you have missed them or want to go through them again.

<https://www.korn-consult.com/news/six-sigma-master-blackbelt-presentation/>

<https://www.korn-consult.com/news/six-sigma-dmaic-methodology-deployment-metrics/>

<https://www.korn-consult.com/news/six-sigma-dmaic-methodology-road-map/>

KORN CONSULT GROUP will be more than happy to talk to you about how this tool may bring great benefits to your company.



KORN CONSULT GROUP

# Six Sigma DMAIC Methodology

## Part 4 / 4



# Six Sigma DMAIC Methodology Content



## 1 Six Sigma SIPOC

# Six Sigma DMAIC Methodology

## SIPOC - Objectives



Understand how to effectively use SIPOC as a high level scoping tool.

Know how to use SIPOC to embrace major elements of your process, and parties in your process.

Use SIPOC as a vehicle for illustrating the boundaries in the process (the start and the end).

Understand how using a SIPOC creates the foundation of your mapping process.

Understand how SIPOC displays the Voice of the Customer (VOC) and their expectations in your process.

Know how a SIPOC helps identify:

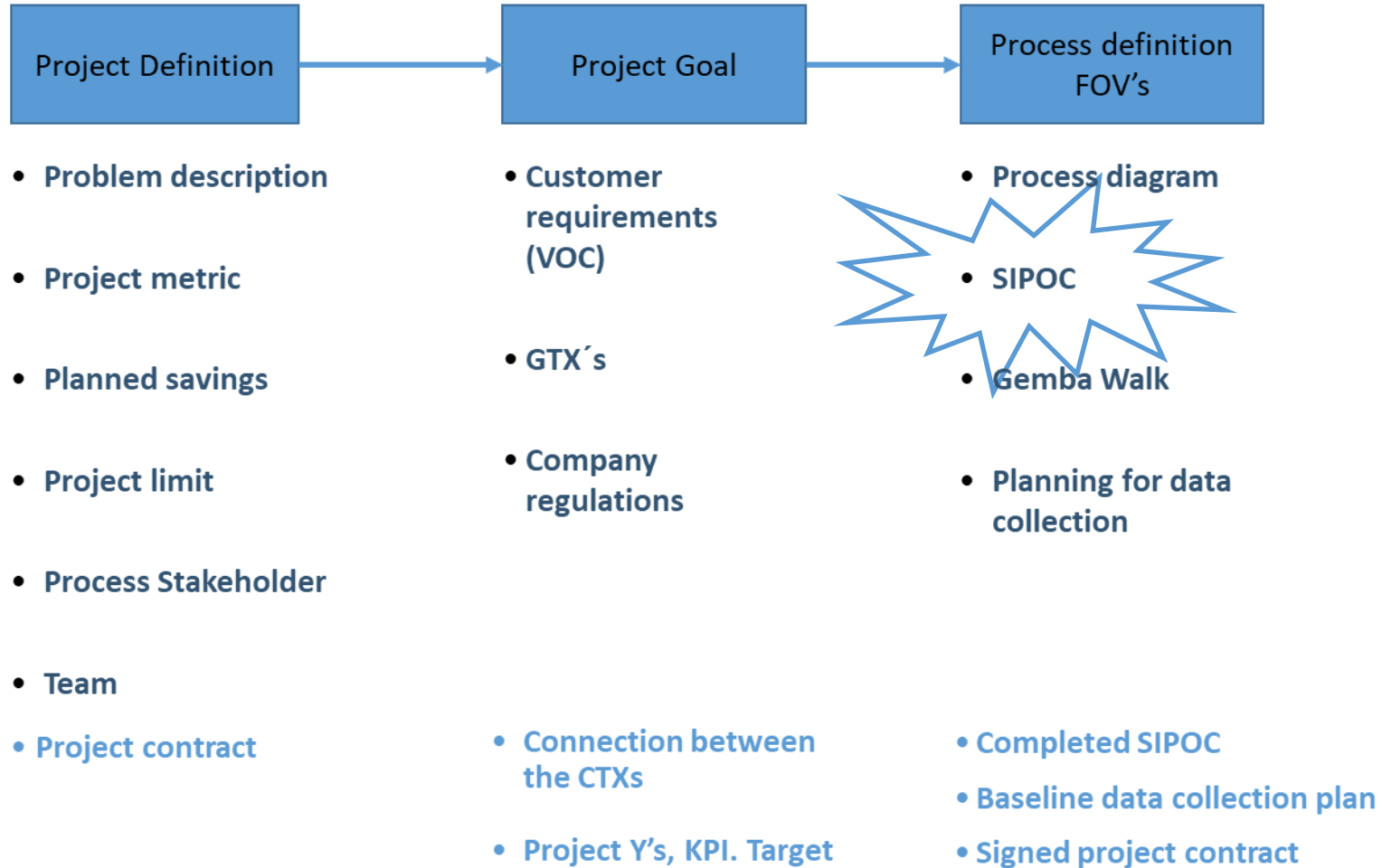
- Key Process Output Variables (“Ys”)
- Key Process Input Variables (“Xs”)

SIPOC High Level Map Use to Define and Scope Your Project

# Six Sigma DMAIC Methodology

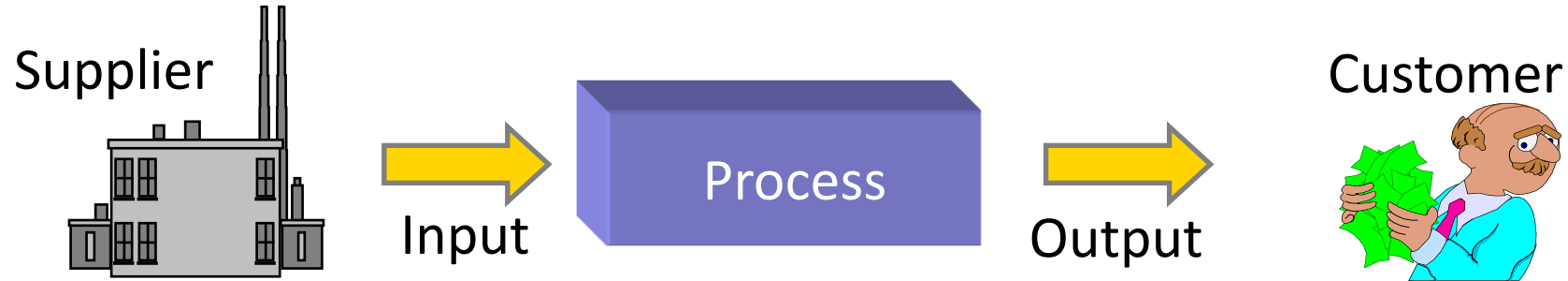
## SIPOC - Objectives

### Define Phase



# Six Sigma DMAIC Methodology

## SIPOC - The Top Level Process Map



<b>S</b> uppliers	<b>I</b> nputs	<b>P</b> rocess		<b>O</b> utputs	<b>C</b> ustomers	
(Providers of the required resources)	(Resources required by the process)	Process Requirements for the Inputs	( Top level description of activity)	(Deliverables from the process)	Customer's Requirements of the Outputs	(Anyone who receives a deliverable from the process)

SIPOC Is a Process Scoping Tool That Provides a High Level Definition of a Business or Industrial Process

# Six Sigma DMAIC Methodology

## SIPOC - Requirements

- Follow the process steps 1-8 in filling out the SIPOC.
- Get customers to identify the Output Requirements.
- Requirements should be measurable (ask customers how they would measure this or decide if it was acceptable).
- Don't identify process steps – these might change and are unimportant to the customer.
- Clarify process start and stop points with customers (use their perspective).
- SIPOC represents Customer expectations of the current process (even if some of these are not there today).

Document Your Entire Process 'Supply Chain' at a High Level

# Six Sigma DMAIC Methodology

## SIPOC - Process Steps 1-8

S	I	P		O	C	
Suppliers	Inputs	Process		Outputs	Customers	
(Providers of the required resources)	(Resources required by the process)	Process Requirements for the Inputs	( Top level description of activity)	(Deliverables from the process)	Customer's Requirements of the Outputs	(Anyone who receives a deliverable from the process)
<b>Boundary</b>						
Brg suppliers, D/S Structures	<b>6</b> What Inputs are required to enable this process to occur?	Shaft dia, life, brg capacity, TRL's, cost, wt, reliability	Assess and	brg selection or new	brg spec	Brg supplier
Shaft suppliers		strength, buckling stability, fatigue life, dyn tuning, cost, wt, repairability, thermal compatibility with T/B	Assess that I choices and select	S	Special handling reqm'ts	Manufacturing
Shaft suppliers	<b>7</b> Who is the supplier of each input?	cost, wt, tuning, handling, shaft length availability	S		Cost, repairability	<b>4</b> Who is the customer of each output?
V		Acceptability of long shaft handling, stocking, cost	What is the process?		handling, shipping	
Shaft suppliers	Shaft mat'l characteristics, cost	<b>8</b> What does the process expect from each input?	Size shaft	Shaft sizing	<b>5</b> What does each customer expect from each output?	D/S Design
	Sizing as previously tested, fatigue strength, stiffness, clearances for shaft motion, compact		When does the process end?	Layout damper		damper design
Shaft size, plus existing data on damper sizing			<b>Boundary</b>			Lord Corp

Keep Your Team at a High Level for The Process