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SIPOC Review

SIMPLER. FASTER. BETTER. LESS COSTLY.

Define

1. Identify CTQ

2. Develop PAF

3. Visualize the Process

Purpose: To identify and prioritize the business improvement opportunity, define critical customer requirements, document the processes and build effective teams

Deliverables:

Project Approval Form; Project Team – TRAIL; CT Flow Down (CTs); SIPOC; Process map (current process); Project benefits; Project plan major milestones; Data Collection Plan; Data Integrity Audit (if applicable)

Measure

4. Understand Metrics

5. Validate measurement System

6. Determine Process Performance

Purpose: To determine what to measure, manage the measurement data collection, develop and validate measurement systems and determine process performance

Deliverables:

TRAIL Chart – updated; Detailed Process Map; Cause & Effect Matrix; FMEA; Decision Tree; Operational Definitions; MSA Evaluation; Data Collection Plan; Capability Study with Control Charts; Project Status

Analyze

7. ID potential Sources of Variation

8. Characterize the X's

9. Determine Significant X's

Purpose: To determine the root causes, estimate population parameters with confidence intervals and to construct hypothesis about the data and test them to determine significance.

Deliverables:

Data Collection Plan- updated; Hypothesis Testing; Decision Tree; MSA Analysis; Capability Analysis- updated; Executive Summary- updated; TRAIL- updated; Analysis Summary; Control Charts- updated

Improve

10. Establish level for X's

11. Develop Solutions

12. Pilot and Implement

Purpose: To develop and quantify potential solutions, improve/optimize the process, evaluate and select final solution and implement the pilot.

Deliverables:

DOE; Lean Analysis; Simulation; Optimal settings for X's; Executive Summary- updated; TRAIL- updated; Implementation plan; Control Charts- updated; Capability Analysis- updated

Control

13. Evaluate Process Performance

14. Develop Control Plan

15. Transition to Project Owner

Purpose: Implement final solution, maintain process improvements, ensure new process problems are identified & quickly corrected, disseminate lessons learned. Identify areas for replication & standardization.

Deliverables:

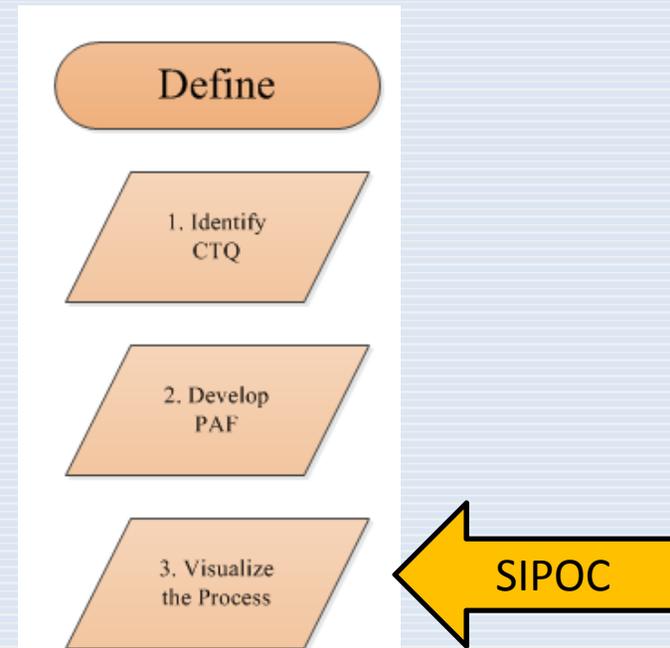
Control Plan; Transition Plan; Capability Analysis- updated; Executive Summary- updated; TRAIL- updated; Control Charts- updated

DMAIC Flow

Define:

- Identify Critical to Quality
- Develop Project Charter
- Visualize the Process

Define Purpose: To identify and prioritize the business improvement opportunity, define critical customer requirements, **document the processes** and build effective teams.



SIPOC

- SIPOC diagram is a type of process map used to identify the primary elements of a process
- It provides a macro view that brings together Suppliers, Inputs, Process, Outputs, and Customers

SIPOC

Suppliers	Inputs	Process	Outputs	Customers
Individuals or organizations that provide inputs to the process.	Material, information and/or services that are required by the process to produce the outputs	The step by step method that produces the output, defined at a very high level- only 4-5 steps	Products, information, services and/or decisions that are produced by the process	Those who receive the process output, pay for it or are directly impacted by the process output

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SIPOC: High Level View



SIPOC

- SIPOC: 50,000 Feet View



Business
Process
Map

- Business Process Map: 10,000 Feet View



Standard
Work

- Standard Work: 1,000 Feet View

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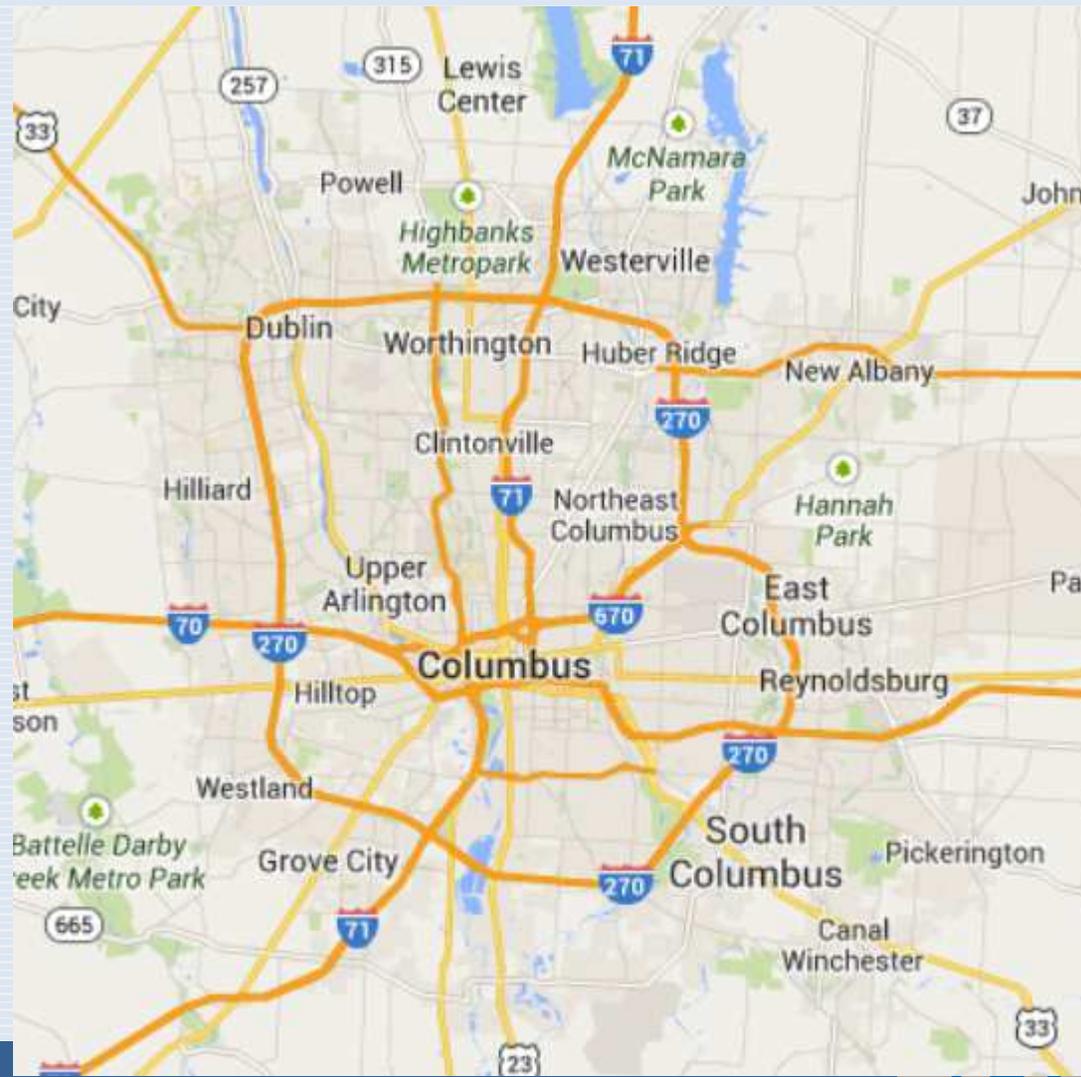
SIPOC – 50,000 Foot View



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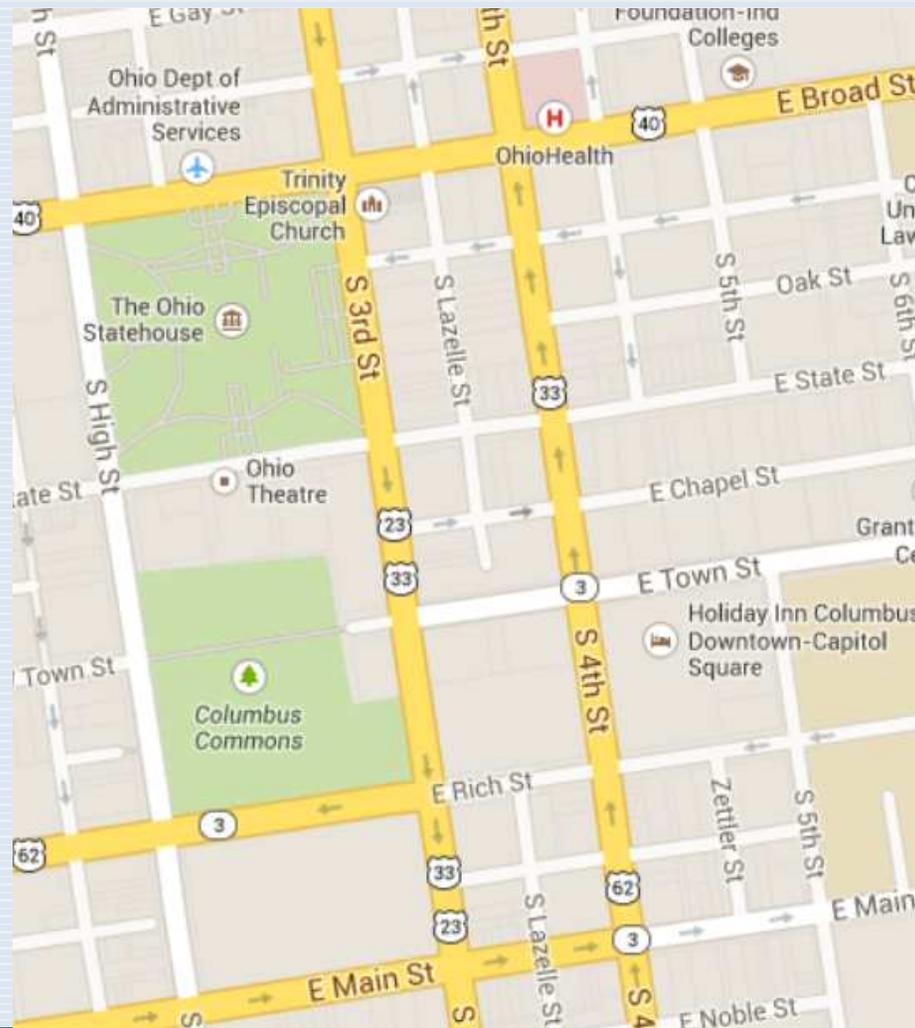
Process Mapping: 10,000 Foot View



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Standard Work – 1,000 Foot View



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SIPOC Purpose

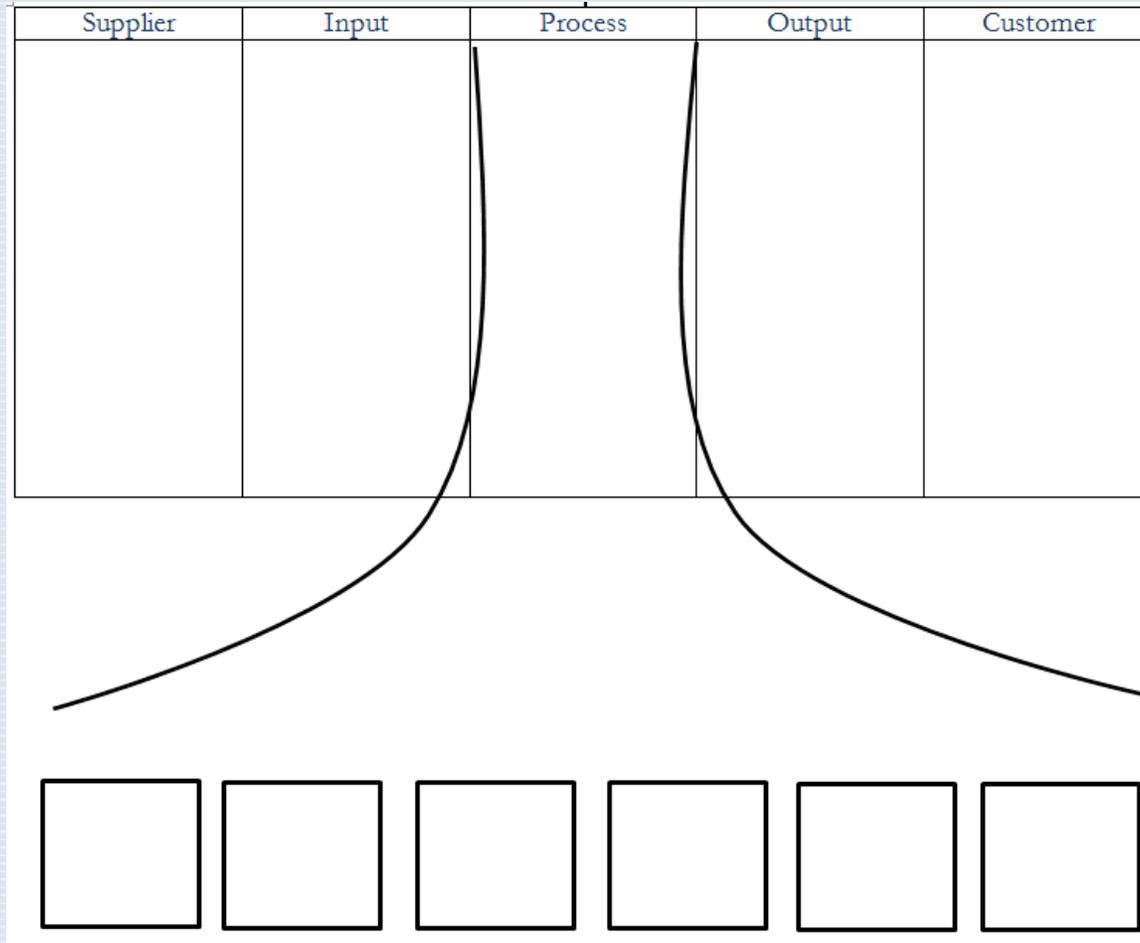
- Define and Document
- Identify scope
- Level Set
- Operational Definitions
- Key Terms
- Ensure it is a Process

Where to Start

- S: Supplier
- I: Inputs
- **P: Process**
- O: Outputs
- C: Customer

Always start with the Process!

SIPOC Visual



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SIPOC - Process

- High Level: 5-7 process steps
- Reach Consensus

SIPOC and other Tools

- When using a SIPOC in conjunction with a C&E Matrix – it is helpful to complete the SIPOC in a slightly different way.
- Looking at the Inputs and Outputs in a step by step way assists in completing the C&E Matrix.

SIPOC Example

The Process of completing the DOP
Application

Suppliers

Inputs

Process

Outputs

Customers



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Suppliers

Inputs

Process

Outputs

Customers

1) Open
and
Deliver
Mail



2) Initial/
Renewal
Review



3) Legal
Review



4)
Approve –
complete
Letters



5) Mail
and
Audit

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SIPOC Example

The Process of Call Center

Suppliers

Inputs

Process

Outputs

Customers

Answer
Call

Gather
Info

Transfer
Call

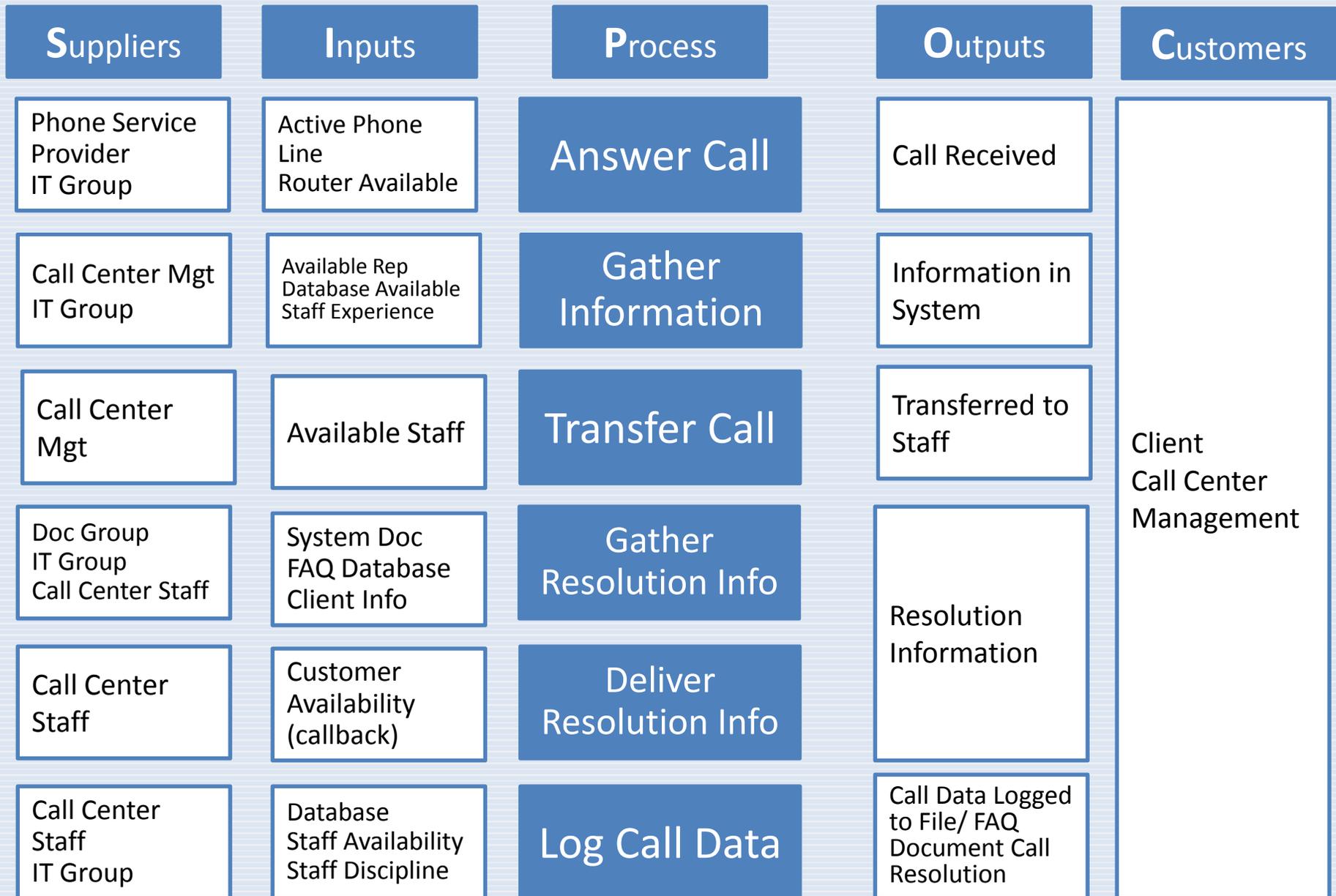
Gather
Resolution
Info

Deliver
resolution
info

Log Call
Data

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SIPOC Exercise

- In groups complete a SIPOC for your project.